

SOUTHERN AUTOMOTIVE JOURNAL

SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES SINCE 1921

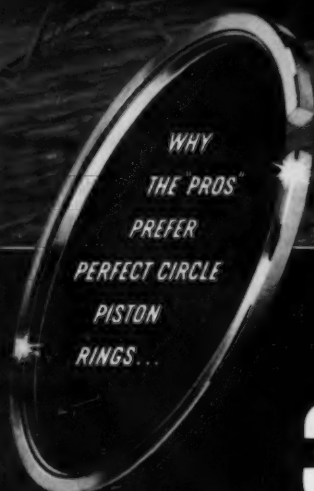
June 1961

✓ Getting the Most Out of the Paint Shop
✓ Servicing TorqueFlite Six Transmission

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Our Road to Safety—page 48 . . . Garage Success by These Three Steps—page 49.

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wding Service Station
Multiple-Pull Method



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OF MOTORS**
Skilled mechanics
the world over
prefer and
install
Perfect Circle
piston rings



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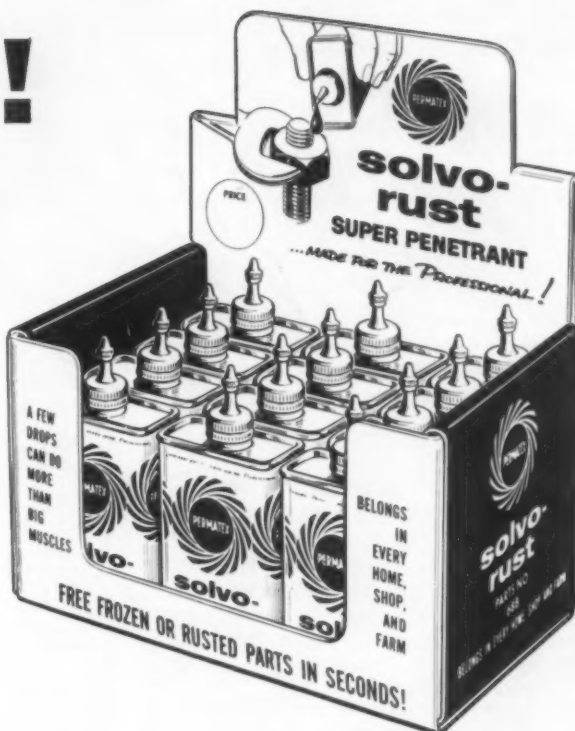
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12 CANS

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SECRET SERVICE TIP FOR YOU.

SHERLOCK McKANICK and MIKE

"THE CASE OF THE BOOKLET
AND THE BEATNIK!"

SHERLOCK, MEET MY
BROTHER JULIUS. I'M TEACHING
HIM HOW TO INSTALL POINTS.
(SAY HELLO TO MR. McKANICK!)

MAN, I
DIG YOUR
CO-PILOT
TH' MOST!

MY
WORD!

WE'VE BEEN
FOLLOWING THE
INSTRUCTIONS IN
YOUR LATEST BOOK,
"TUNE UP FOR
PROFIT."

SPLENDID! I HOPE
YOU'RE ADVISING JULIUS
TO ALIGN THE CONTACT
SURFACES PROPERLY. VERY
IMPORTANT TO PREVENT
UNEVEN WEAR AND LENGTHEN
POINT LIFE.

misalignment
of point faces

CONTACT
AREA
NOT
CENTERED

misalignment
of centers

CONTACT
AREA
NOT
CENTERED

correct
alignment

CONTACT
AREA
CENTERED

YEAH-H!
GOTTA KEEP 'EM
SQUARE MAN!
LIKE ON PAGE
SIX!

YES, THIS IS WHAT WE
FOLLOWED: "IF POINTS NEED
RE-ALIGNMENT, MAKE SURE
IT'S THE STATIONARY ARM
YOU BEND, NOT THE MOVABLE
ONE WHICH HAS LESS STRUCTURAL
STRENGTH AND MAY BE
SERIOUSLY WEAKENED BY
BENDING..."

YOU'VE
DONE
IT, BY
GEORGE!

THIS
BOOKLET
MAKES IT
EASY...
AND THE
NAME IS
**JULIUS
MAN!**

MECHANICS: GET "TUNE UP FOR PROFIT"
...SHERLOCK'S GUIDE TO IGNITION SYSTEM
SERVICING. IT'S A CLEAR, 12-PAGE EXPLANATION
OF HOW TO SERVICE THE BATTERY, COIL, POINTS,
DISTRIBUTOR AND
REGULATOR. NOW
IT'S YOURS **FREE!**
(USUALLY SELLS FOR \$1.00)
MAIL THIS COUPON
TODAY!

MISS
WATSON
IS IN THE
BOOK, TOO.
LIKE WOW!

YOU SURE
KNOW YOUR
POINTS,
SHERLOCK!

NO WONDER 42,000
REGISTERED DEALERS
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IGNITION IS BETTER FOR
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SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Volume 41

No. 6

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Serving the 19 Southern and
Southwestern States Since 1921

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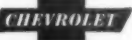
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WHEN CAR AND TRUCK OWNERS SPEAK THEIR MINDS— nobody listens like Chevrolet!

The Chevrolet Owner Relations Program, first and only one of its kind in the industry, works in many different ways to find out what owners want in the way of products and services. Even at the Auto Shows and General Motors Motoramas, where the latest automotive products are displayed, owners of past and present Chevrolet models—and all other makes, for that matter—are sounded out on their opinions of Chevrolet products and services. By knowing what pleases today's owners most, Chevrolet retains their loyalty and wins new customers for the future.

In this most recent move by the Chevrolet Department of Owner Relations, auto show and Motorama visitors from New York to San Francisco were given questionnaires at a special booth. They were asked to give their frank opinions on Chevrolet and Chevrolet services—and to list features they would like to see on future models. We're happy to say the majority of the opinions were most flattering to Chevrolet and dealers. But the compliments and criticisms alike are important guides toward

strengthening our continued efforts to give customers the kind of products and services they want.

Car owners know what they want and nobody knows it better than Chevrolet. Through these customer-keyed programs, the Chevrolet Department of Owner Relations keeps working to maintain owner product and service preferences of today—and build even greater preferences for tomorrow. . . . Chevrolet Division of General Motors,  Detroit 2, Michigan.

Chevrolet dealers are No. 1 with customers because customers are No. 1 with Chevrolet dealers





Automotive **SPOTLIGHT**

June 1961

Cars are getting better and better. That's true even if you and your customers pound at panels and declare that the metal isn't as thick as it used to be. Lower center of gravity gives cars greater stability than a generation ago. Many '61's have safety door locks, windshield washers, sealed beam headlamps and foot dimmer switch—none found on the '36 Buick, for example. They have controlled ventilation, foam rubber padded seats, quietness, improved suspension and easier handling. That's what President John F. Gordon of General Motors asserted last month in answering the remark sometimes heard about automobiles: "They don't make 'em like they used to." In view of the above, Gordon was quick to agree.

Automotive jumbings: The death of Walter Cooper of Colorado left Tom Abbott, veteran Pontiac dealer of Fort Worth, Texas, as next in line at the helm of the National Automobile Dealers Association, whose membership approximates 20,000 . . . Marquette Corp., Minneapolis, Minn., has bought Heyer Industries, Inc., Belleville, N.J., broadening Marquette's manufacturing of automotive service equipment. . . . Tired of hearing an array of speakers—some good, some bad—at conventions? So are members of the Florida Automotive Wholesalers Association, who'll get down to bedrock table discussions of their problems at Miami Beach's Americana Hotel in November—but no speakers. . . . United Motors Service Division has concluded a series of coast-to-coast meetings advising its distributors that it will merchandise all its replacement parts under the name United Delco, enabling UMS "for the first time to distribute our products under one unified image and still retain each product's individuality," with "Delco Rochester," "Delco New Departure," "Delco Hyatt," etc., the new identification. . . . A nationwide network of independent distributors will market Chrysler Corp.'s "Safeguard" glass in the replacement field. . . . Ralph H. Isbrandt has been named vice president—automotive engineering and research at American Motors Corp. . . . A departing veteran at Chrysler is Charles L. Jacobson, who has been vice president—dealer relations, and in that capacity admired by many of Chrysler's dealers. . . . Ed Quinn, Chrysler's sales chief, has assumed these new duties additionally. . . . A new two-acre building to house Chevrolet's Charlotte zone office and warehouse is to be built immediately. . . . Chevrolet's top brass, Ed Cole, told Georgia dealers: "The main reason for maintaining such wide public choice in our products boils down to one word: competition. If one company here in this country doesn't make a certain kind of car available, another will. Or some foreign country will. Or customers will just decide if we are not going to build the kind of cars they want, they can find other places to put their money."

Are you swinging over to more night service? Lively Ed Cole, who's considered a likely one for the next presidency of General Motors, said that two years ago Chevy had about 50 dealers offering night service. "Now, as a result of our recommendations, more than 600 Chevrolet dealers have lengthened their service hours. And the customers really love it," he said.

The nation's garagemen convene again. Last year it was at Atlanta. Late this month it's to be at St. Paul, Minn., where members of the Independent Garage Owners of America gather in their continuing effort to upgrade themselves and their shops for an increasingly critical clientele.



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Steel

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5,000,000 CARS BUILT WITH STAINLESS STEEL OIL RINGS

Every one Sealed Power designed

Why this big swing to Sealed Power Stainless Steel oil rings? Because exhaustive laboratory and field tests proved no ring yet controls oil as well. The engine designers staked their reputations on it. And the Stainless Steel oil ring proved them right—won acceptance with car and truck builders faster than any other by far.

Thousands of mechanics, too, have dis-

covered its superiority. This universal acceptance is important to you. Take Sealed Power's Stainless Steel oil ring—your ability to perform a good overhaul—and you have an unbeatable combination.

The Stainless Steel oil ring side-seals, holds its fit, retains its tension, resists sludging and corroding, is easy to install. Sealed Power Corporation, Muskegon, Michigan.



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Stainless Steel piston rings stop oil pumping

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Automotive MARKETS

Dealers' Loss in Shop Business Cited

FRANCHISED dealers' sharp decline in shop volume was cited last month in an address by Ben D. Mills, vice president of Ford Motor Co. and general manager of the Lincoln-Mercury Division, before the annual convention of the Texas Automobile Dealers Association at San Antonio.

Said this 46-year-old native of Vian, Okla.:

"One of the most striking changes in our business—statistically at least—is the persistent decline in dealer service business. Here is a big and vital industry that is slowly being lost to our competitors outside the industry. As recently as 1952, new-car dealers got 28% of the total service work; today they get only 15%. Even their handling of major repairs has declined from 36% of all such work in 1952 to 23% at the end of 1959.

"Some assign as the reason for this decrease improved product quality and durability, and point to such features as permanent lubrication and self-adjusting brakes. But this would not account for the percentage decrease. Others say that the growth of independent garages, specialty shops, fleet shops, and improved facilities in service stations accounts for it. But that only pushes the question back. Why have they sprung up in such numbers? How did they manage to take away business that once had been done by the new-car dealer?

"I am not going to try to answer that question here. But I do want to point out that the parts and service business is big business by any standard and that thousands of companies have come into existence to compete for it. Today the total retail automotive parts and service business—including everything except gas and oil—is an \$11.7-billion industry. Franchised dealers are getting only \$4.3 billion of that market. I suggest that no franchised dealer can become so engrossed in selling new cars that he does not energetically compete for his share of a market of that size."



Five Per Cent of Dodges Get Air Conditioners

NEARLY five per cent of all Dodge cars built are being equipped with air conditioners, according to Byron J. Nichols, Dodge general manager.

The increase in sales of air conditioners can be attributed to the public's quest for comfort and convenience, Nichols said, but it is also a result of continued improvement in the performance of the units.

In 1960, Chrysler Corp. installed more than 40,000 air-conditioning units when the cars were built, and

dealers installed another 12,500 Mo-Par units. The cost per unit was \$445.60. In 1961 models, if radio-heater group is purchased, the air-conditioner price is \$374.70.

Nichols foresees a big increase in the use of air conditioning in cars as the summer months roll around.

"An increasing number of people each year have added optional equipment on their cars," he said, "and they're doing the same thing with air conditioners. Naturally, we sell ten times as many units in the South as in the North, but we get more and more orders from higher and higher latitude each year."

30% Sales Increase Credited to Radio

TWO-WAY radio is credited with helping considerably to ring up a 30% sales increase over the previous year for Nelson Motors, Lincoln-Mercury dealership in Columbia, S.C.

Owner Pat Nelson said the system had enabled his firm to "make more sales and make better sales because of the communication between the salesmen, sales manager and general manager.

"The salesmen do not have to wait around for prospects to come into our showroom now," he said.

The company began its mobile communication system in 1960 when it installed units designed for low battery drain in salesmen's cars.

Charlie Whipple, general manager, said the sales increase resulted from salesmen having more time out with the prospects and the ability to close the sales faster, since the system made possible contact with the sales manager for information concerning trades and financing.

The two-way radio means more freedom and more time away from his desk for Sales Manager John Wilson. He doesn't have to stay in the office to okay transactions. He can direct salesmen from his car.

Sales productivity is the primary benefit of the new system, Wilson said. "My salesmen can make 50% more contacts than they did previously—and the customers love it."

Salesman Ward Gailey said the average customer is impressed with the mobile radio.

"When they are driving my demonstrator with the two-way unit in it," he said, "we can contact the prospect and point out features of the car as the customer and his family drive down the road."

With about 70 people in the Nelson organization, internal sales information sessions are a necessity. Where these were formerly held weekly, Nelson can now assemble everyone within an hour's time.

The cost of the communication system is negligible, Nelson said, compared with the increased sales.

"You'd think this body shop's a boudoir
... since I switched to

BOND-TITE

"Things sure
have changed
'round here since I've used
BOND-TITE PLASTIC FILLER.
I've regained my charming per-
sonality 'cause BOND-TITE
eliminated fumes. And I have
more time for the girls, too,
thanks to BOND-TITE's
smooth-working flexibility
that makes all body repairs
quicker, easier."



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Oatey

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26 Parts Lists

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- Nozzle Testers for American Bosch, Caterpillar and Bendix Nozzles
- Cummins Injector Tester
- International Harvester Injection Testers
- General Motors Injector Testers
- Injection Pump Calibrating Stands
- Nozzle-Injector Cleaning Tools and Lapping Blocks
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CITY AND STATE _____

AD-15

Next Month's Editorial Menu

LUBE RACK: Funnel for Shop Jobs

"The secret of an ever-increasing volume in service and parts is a competent lubrication man."

That's the experience of this service station operator. A substantial portion of his \$450,000 annual gross comes from the lube rack.

How he operates to produce maximum dollars from the lube rack will be told by him.

How much volume do you handle a year in brake jobs? Next month a garage-man will reveal how he manages to maintain around \$10,000 annually from this source. His gains each year have been creditable.

TECHNICAL-WISE

Summer brings some tune-up problems of its own. Technical Editor Ed Lowery will cover items whose neglect causes poor engine performance during those making-you-want-to-be-lazy days of July and August.

As usual, this two-generations-plus expert on car repairing and servicing will be writing from his own experiences and observations in the shop he operates with a force of almost 100 persons.

For body shops, Ed will take up adjusting, replacing and aligning the deck lid and tailgate torsion bars of several popular makes.

Pressing into print also will be an article for fleet operators and others concerned with the heavy duties. It will deal with repairing truck chassis, including ample illustrations of what steps are taken to assure satisfactory and lasting performance.



Automotive NEWS BRIEFS



This train layout, mounted on a 4" x 8" plywood, extends out from the left end of the counter at Allied Auto Parts in Lucedale, Miss. Store's owner, Emmett Hughes, said he believed this setup was "a little unique" because "I am sure no other jobber in his right mind would set a thing like this up in a place where he expected to make a living." The controls are under the counter and consist of 275-watt and 40-watt transformers and four single switches to operate the four automatic switches on the road. Hughes purchased everything except the small warehouse, the loading dock and light poles, which he made by hand from pieces of cigar boxes, strips of wood and glue. A ceiling light burns in the warehouse. Background picture was painted by Mrs. J. G. Hindsman of Mobile.

JANUARY	APRIL	AUGUST	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Looking Ahead

DEALERS

- June 18-20—Annual summer meeting of Automobile Trade Association of Maryland, Commander Hotel, Ocean City.
- Aug. 20-23—Annual convention of Automobile Dealers Association of West Virginia, The Greenbrier, White Sulphur Springs.
- Oct. 29-31—Annual convention of Florida Automobile Dealers Association, Galt Ocean Mile Hotel, Fort Lauderdale.
- Nov. 12-14—Annual convention of Mississippi Automobile Dealers Association, Buena Vista Hotel, Biloxi.
- Feb. 3-7—Annual convention of National Automobile Dealers Association, Atlantic City, N.J.

April 22-24—Annual convention of Automotive Trade Association of Virginia, Golden Triangle, Norfolk.

GARAGEMEN

- June 28-July 1—Annual convention of Independent Garage Owners of America, Lowry Hotel, St. Paul, Minn.
- Aug. 4-5—Annual convention of Independent Garage Owners of South Carolina, Poinsett Hotel, Greenville.
- Aug. 18-20—Annual convention of Independent Garage Owners of North Carolina, Sir Walter Hotel, Raleigh.
- Sept. 15-17—Annual convention of Independent Garage Owners of Georgia, Ida Cason Callaway Gardens, near LaGrange.

WHOLESALESA

- June 25-27—Annual convention of Automotive Wholesalers Association of Alabama, 400 Motel, Pensacola Beach, Fla.
- Aug. 13-15—Annual convention of Kentucky Automotive Wholesalers Association, Phoenix Hotel, Lexington.

- Oct. 11-14—Annual convention and booth conference of Automotive Wholesalers of Texas, Granada Hotel, San Antonio.
- Oct. 27-29—Fall convention of Virginia-Carolinas Automotive Wholesalers Association (for members only), The Greenbrier, White Sulphur Springs, W.Va.
- Oct. 29-31—Annual convention of Virginia Automotive Wholesalers Association, Hotel Roanoke, Roanoke.
- Nov. 9-10—Annual convention of South Carolina Automotive Wholesalers Association, Fort Sumter Hotel, Charleston.
- Nov. 16-18—Annual convention of Florida Automotive Wholesalers Association, Americana Hotel, Miami Beach.
- Feb. 28-March 3—International Automotive Service Industries Show, Navy Pier, Chicago.
- Feb. 13-16, 1963—International Automotive Service Industries Show, Philadelphia.

GENERAL

- July 31-Aug. 2—National Auto Accessory and Parts Exhibit, Las Vegas.
- Oct. 30-Nov. 2—Annual convention of Automotive Warehouse Distributors Association, Muehlebach Hotel, Kansas City, Mo.
- Nov. 8-10—Annual convention and trade show of Automotive Parts Rebuilders Association, Biltmore Hotel, Los Angeles.

Maryland Governor Kills Outside Mirror Bill

Governor Tawes of Maryland last month vetoed the bill which would have required all new motor vehicles sold after June 1 to be equipped with an outside mirror on the driver's side.

The action by the governor eliminated the requirement for new vehicles. The law relating to outside mirrors remains the same as it has been for many years.

Buick Appoints Curry

William C. Curry has been appointed regional sales manager for Buick in Dallas, Texas, succeeding John H. Scudder, who transferred to a similar position in Chicago. Curry, formerly Cincinnati zone manager, joined Buick in 1939 as a lecturer at the New York World's Fair.

\$109.50 BUYS AIR POWER FROM COATS



**ANNOUNCING THE REVOLUTIONARY BELL-AIR —
THE FIRST AIR-POWERED TIRE CHANGER EVER
OFFERED AT THE UNHEARD OF LOW PRICE OF \$109.50**

Now every man who handles tires can enjoy the convenience and ease of *air-powered* bead-loosening, because Coats has invented an entirely new kind of power unit. Not a cylinder, not a piston but a brand new concept in air power, using a super-tough neoprene expansion chamber, designed by Coats to give you the fastest, safest bead-loosening at the *lowest* possible price.

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Department 901

(Please address your inquiry to the Hennessy office nearest you. See addresses at right)

Gentlemen: Please send by airmail all of the details on the sensational new Bell-Air tire changer, the completely different kind of air-powered tire changer offered for only \$109.50.

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COATS PROVED BEST, COSTS LESS — Made by the World's Largest Manufacturer of Tire-Changing Equipment

Dealers' Profit Is 0.2%

FRANCHISED car dealers continue to have a rough time squeezing out profit. The National Automobile Dealers Association's business management survey for the first quarter of this year set forth:

"Following the disastrous final quarter of 1960, new-car dealers found profits equally hard to come by in the opening months of this year.

"Working against odds in a sluggish market that failed to improve at the turn of the year, their problems were further aggravated by extreme weather conditions in most parts of the country.

"At the quarter's end, their combined operating results before federal taxes averaged out to a red figure of .2% of total sales, or an over-all loss of \$11 per new car delivered. 39.3% of all dealers were found to have closed out the three months' business with a loss.

"Hardest hit were the smaller dealers. Those in NADA's volume group I, with sales last year of less than 150 cars, registered a combined loss of .5% of sales or \$27 per car.

"A year ago, in the same period, over-all profits were on the plus side for an average of 1.5% of sales, or \$70 per car, with only 16.1% of dealers showing a loss.

"Combined gross profit from all departments amounted to 15.5%, up one full percentage point from the average for all last year. Two major factors contributed to this increase: dealers were realizing higher profits on their car operations, evidenced by a wash-out gross from combined new- and used-car sales of \$397 per new unit sold. This compared with the average of \$352 for all of 1960, and \$400 in the first quarter of last year. A second factor was the increased ratio of high-gross service business to total business, as car sales fell below the normal ratio.

"Selling expenses of 3.8% of sales showed only a slight increase from the 3.7% average for all of last year, and 3.6% in 1960's first quarter. Abnormally low car sales, however, brought an automatic increase in the ratio of fixed, or operating, expense, which rose to 11.9% of sales, or \$600

per car. Comparable figures were 10.3% or \$487 for all of 1960, and 10.0% or \$478 in the same period last year.

"Car absorption, the ratio of wash-out gross after selling expenses to fixed overhead, dropped to 34.3%."

Southern Garagemen Head For St. Paul Meeting

SCORES of Southern and Southwestern garagemen are expected to attend the sixth annual convention of the Independent Garage Owners of America June 28-July 1 at the Lowry Hotel in St. Paul, Minn.

A "Parade through the Industry," featuring noted personalities in the four major phases of the independent automotive industry, will highlight the Saturday afternoon general session.

A noted garageman representing IGOA and an outstanding member of the Automotive Warehouse Distributors Association have been asked to complete the "parade."

An exciting "kickoff banquet" will highlight the Thursday, June 29, agenda. Following an official welcome to Minnesota, keynote speaker Morgan Potter will set the stage for the entire convention. Potter, executive vice president of Marquette Mfg. Co., Minneapolis, is an ex-officio director and charter member of the Equipment and Tool Institute. He has also been a director on the board of governors of the old National Standard Parts Association.

For entertainment, the kickoff event will feature Bud Jacobson, the "Gentleman Pickpocket."

Friday luncheon is sponsored by Gould-National Batteries, Inc., an IGOA allied member company headquartered in St. Paul. Following the luncheon, G. D. Hauser, Gould-National field engineer, will offer his presentation, "A Trip through a Battery Factory." Hauser handles most of his talk with the aid of flannel boards, but will also manufacture a battery as he tells how it's done.

Friday evening it's Jerry Mayer, a St. Paul fire prevention engineer,



IGOA President Kittell

and his dynamic "Fire Power Demonstrations." Mayer uses actual fires, explosions and smoke to explain how to prevent the potential fire and explosion disasters present in every home and business place.

Saturday's general session is packed with veteran leaders in various fields. First on the agenda is William F. Streeter, IGO-Minnesota credit counselor, who will bring his more than 31 years of credit and collection experience to the delegates. Streeter will be followed by Edward Ford, editor of *Motor*, and Joe Schmidt, president of the National Auto and Flat Glass Dealers Association.

Other featured speakers on Saturday's program include Jack Heffinger, publisher of *National Market Reports*; H. F. "Red" Reagin, immediate past IGOA president, Atlanta, Ga.; Bryan Davis, past president of IGO-North Carolina, Raleigh; Frank Tighe, editor of *Motor Age*, and Mel Turner, seasoned garageman from Chicago and curriculum director of the Automotive Service Industry Association.

Saturday night's inaugural Banquet will feature Ben Forsyth, editor of *Northern Automotive Journal*, introducing his fellow worker, Fenderdent Butts. Chuck Davis, executive editor of *Jobber Product News*, will then speak on the "I will" spirit before overseeing the presentation of the Moog-Industries and McQuay-Norris trophies.

Installation of new national officers will complete the program under the direction of the outgoing national president, Art Kittell of Pittsburg, Kansas.

SAFEGUARD ENGINE OVER-HAULS

Your reputation is in the hands of your customers. You can help them protect it. Here's the secret . . .

After the break-in period, engines need a motor oil that will keep parts clean and free-moving—and at the same time give peak lubrication protection *full time*. It insures smooth performance from the good work you do. Brings customers back for more service business. Builds bigger profits for you!

The oil that fills the bill is Pennzoil—the world's richest, most complete motor oil. So rich, it gives double the protection demanded! So complete, users never need extra additives! Because the special power ingredient, Z-7, keeps parts *clean*—stays on the job for the full life of each oil change.

Pennzoil Z-7 makes customers happy . . . builds more business . . . boosts your profit! So protect *all* your engine jobs with Pennzoil. Call your Pennzoil distributor, listed in the Yellow Pages, or write Pennzoil, Oil City 33, Pa.



2 Great Motor Oils!

This great pair of 100% pure Pennsylvania Motor Oils with Z-7 stays tough full time—keeps moving parts clean and free of excessive wear. Use them—recommend them, for top customer satisfaction.

Famous Pennzoil with Z-7
In all correct service grades.
Pennzoil 10W-30 with Z-7,
world's only oil-rich,
multiple-viscosity oil.



Member Penn. Grade Crude Oil Assn.,
Permit No. 2, Oil City, Pa.

Automotive NEWS BRIEFS

(Continued from page 11)



These men will lead the North Carolina Automobile Dealers Association for the next 12 months (l. to r.): Wilson F. Yarbrough, Jr., Fayetteville, treasurer; Rupert E. Atkins of Raleigh, president; Arthur P. Harris of Charlotte, vice president, and J. M. Deaton, Jr., of Statesville, secretary. Mrs. Bessie B. Ballentine of Raleigh is the veteran executive secretary of the association.

Ford Adds Glass Furnace At Nashville Facility

LIGHTING of a new sheet glass furnace last month marked the completion of an expansion program at the Nashville (Tenn.) Ford glass plant which has more than doubled production capacity of the four-and-a-half-year-old facility.

The vertical draw furnace, which occupies a building separate from the main plant, will hold 1,600 tons of molten glass, from which four continuous ribbons ten feet wide are drawn to a height of 46' (approximately four stories) before being cut into sections. From the top floor of the new 135,000-square-foot building, the pieces of glass will be lowered to ground level by elevator and then moved to the fabricating area.

With the furnace in operation, the plant will be capable of producing more than 1,100 tons of glass per day—"approximately 18 football fields could be put 'under glass' with a day's output."

In a single production year, the plant expects to purchase approximately 400,000 tons of sand mined at Camden, Tenn., and an estimated 25,000 tons of limestone from Anderson, Tenn. More than 150 different types of automobile glass are made at the plant, which began production late in 1956 and now produces "Made-in-Nashville" glass for all Ford Motor Co. products.

Mills of Lincoln-Mercury Cites Growing Diversity

INCREASED product diversity will be even more of a standout feature in automobile selling in the near future, according to Ben D. Mills, Ford Motor Co. vice president and general manager of the Lincoln-Mercury Division.

"Greater diversity of product will come," Mills said, "for the simple reason that the customer is demand-

ing diversity and no dealer and no manufacturer will dare not to give it to him."

Speaking before the convention of the Texas Automobile Dealers Association in San Antonio, Mills said:

"Diversity is opportunity—the chance to change our luck, to challenge competition with new products—the chance for the able little fellow to get big fast.

"For better or for worse, manufacturers and dealers must, in the existing market, learn to live with diversity and not fight it; learn to profit by it, not fear it.

"Not only do we compete among ourselves, we also compete more and more directly with producers throughout the world. One of the proudest accomplishments of this industry has been to turn back a major assault on our market by small, well-made foreign cars, and doing it in the marketplace by fair and hard competition."

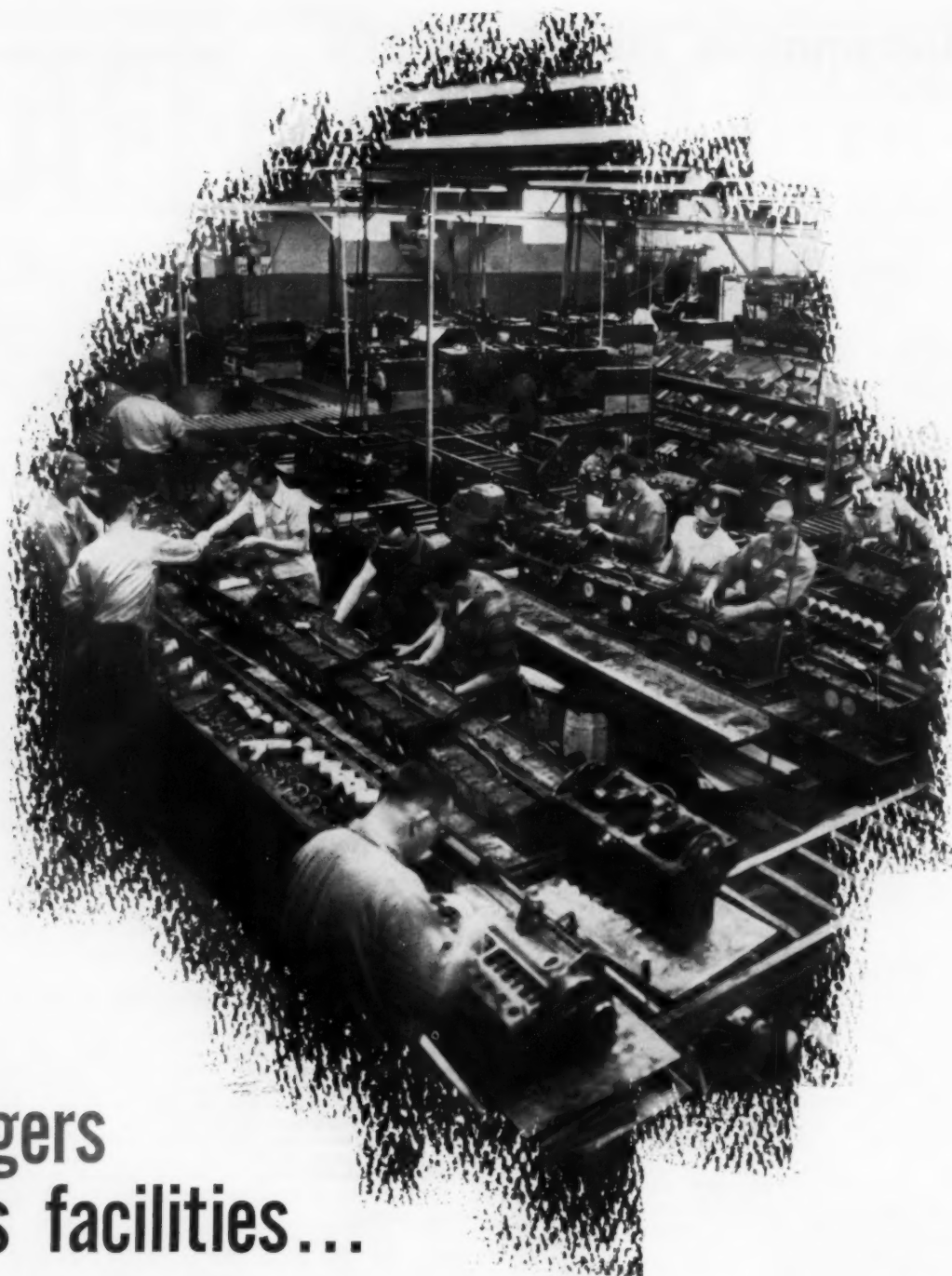
(For additional remarks by this factory executive, turn back to page 7.)

Clearwater Reelects Burkhardt

The Clearwater (Fla.) Automobile Dealers Association has reelected officers, with Richard H. Burkhardt of Clearwater Rambler, Inc., returning to the presidency.

Charles Reed of Memphis (seated left) is shown immediately following his election as president of the Tennessee Automotive Association at that group's annual convention in Nashville last month. Seated at right is Ivan Potts, the new secretary-treasurer. Regional vice presidents standing are (l. to r.): J. Guy Henderson of Ripley, J. Houston King of Nashville, Stokely Doster of Chattanooga, Fred Michie of Jackson, George Terry of Oneida and Darrell Eagleton of Maryville. Not shown are regional Vice Presidents Roy Byrn of Murfreesboro and Robert Looney of Kingsport. Nine speakers appeared on the three-day program, including Governor Buford Ellington. Reed succeeds Roy Cruze of Knoxville as president.





Rogers has facilities...

the right facilities for remanufacturing quality engines! Superior replacement engines can't be produced just anywhere by just anybody! It takes the right workers, with the right tools and equipment, and the right space. The John Rogers Co., world's largest remanufacturer of automotive engines, has all three. Nearly 200 skilled craftsmen, over \$1,500,000 worth of precision tools and equipment, more than 100,000 square feet of work space. Your reputation rides with the engines you install... protect it. Install Rogers engines exclusively!

ROGERS
Remanufactured
ENGINES

Georgia Dealers' President Asks:

Must Finance Rate Yield Sole Profit?

"How much longer can this industry use the high rate of finance on time sales to cover its lack of operating profit?"

That was a question, followed by some possible answers, directed by Darrell Johnson of Thomson to members of the Georgia Automobile Dealers Association last month as part of his report as their retiring president.

Said the veteran Chevrolet-Cadillac dealer:

"There is pressure on our duly elected members of congress to enact regulations which require the interest rate charged for time finance to be shown on the invoice.

"Some states have passed laws or regulations which control time financing within a reasonable bracket according to the age of the car sold.

"Bad practices prevail of selling or trading at low gross profit when a high rate can be used in the finance charge to offset the low gross.

"The privilege of using finance income to effect a profit that should have been made on the sale is too easy of abuse to ever expect this condition to improve; it can only become worse and it will result in regulations on financing which can conceivably eliminate all finance income to the dealer.

"The problem is comparable to a cancer that if corrected in time the patient may live a full life but if ignored can bring an early death.

"Do we recognize this growth as an operation which if performed now into the enactment of a uniform finance regulation by the state legislature, can set a schedule of rates which allows a reasonable reserve for the liability incurred? Or, shall the growth of this abuse be ignored and an untimely end find the finance participation a matter of cost to get a contract purchased rather than a reserve for this liability which is assumed?

"Take it from there. If you have an opinion, then let it be heard, for



the goose may soon die and no more golden eggs will be laid."

Johnson went on:

"Shall we be called ignorant because we failed to recognize the principle of the right price for the quality offered for sale?

"Shall we be unprincipled by using ignorance as to the cost of financing in order to realize a gross that should be a part of the sale?

"These may be called the 'tricks of the trade,' but they are causing our business to become such that each dealer is at variance with his fellow dealer and the victory is not going to any dealer because the battle appears to be an empty victory—there may not be any survivors.

"Emerson said it this way: 'The value of a principle is the number of things it will explain, and there is no good theory of a disease which does not at once suggest a cure.'"

This dealer earlier this year inaugurated a plan of posting on his new cars and trucks the true selling prices below which he would not sell. This was published on page 35 of SOUTHERN AUTOMOTIVE JOURNAL last month.

In his letter to GADA members he said of dealers:

"We quote a price which is understood by the public as higher than it can be bought.

"We start the sale by offering a

discount or an overallowance and Mr. Public is led into a realm of uncertainty as to 'What is the price?'"

On the other hand, he pointed out:

"The present generation has been trained to pay the price marked on the goods or leave it on the shelf until they come to buy an automobile or an appliance (and these appliance merchants also say 'no profit').

"What is the difference in retail selling between a suit of clothes, a house and that of an automobile or an appliance? Have we argued ourselves into a false position when we contend that the customer prefers to spend his dollar in a different manner for the car than for his other needs?

"Why are we asked so often this question: 'What will you sell me a car for straight?' He may be searching for the correct selling price to which he is accustomed in his other purchases. He is interested, certainly, in not paying more than others pay for the same merchandise.

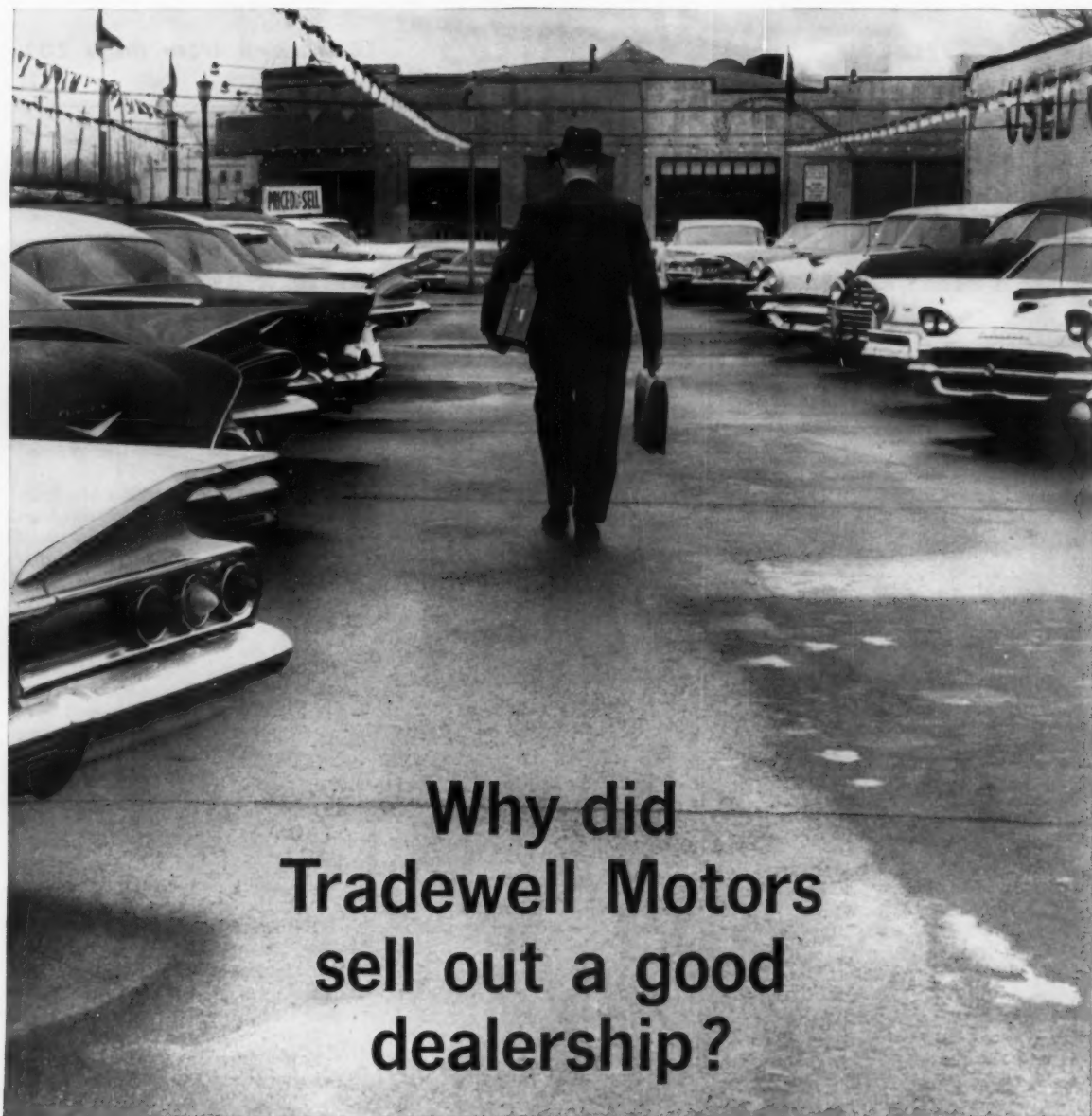
"It may well be the cause of what is termed the 'shopper' because he wants to know 'What is the price?'"

Missouri Dealers Elect Zenge President

WEARL ZENGE of Lewis County Motor Co. (Ford), Canton, was elected president of the Missouri Automobile Dealers Association at its 22nd annual convention in St. Louis last month.

Other officers are Jerry Scott, Jr., of Jerry Scott, Inc. (Lincoln-Mercury), Kansas City, first vice president; Al Fuchs of Goddard Motors, Inc. (Plymouth), St. Louis, second vice president, and J. M. "Tom" Allton, reelected treasurer. James A. Gorman is the manager.

A new capsule-type convention program under the chairmanship of retiring President C. A. Gilbert reportedly was well-received.



Why did Tradewell Motors sell out a good dealership?

After 25 years of operation by one owner, a certain successful dealership changed hands. And the rumor factories started grinding out reasons why Big Joe (not his name) pitched in the towel.

Some said the manufacturer wasn't satisfied with "Tradewell Motors" per cent of price class and set up the buyout. Others said Big Joe made his bundle, wanted to take it easy. Still others felt he was in a precarious operating position with 4 high-rent locations for 500 to 600 unit volume.

Big Joe himself said, "Every year it

gets rougher and tougher to make a satisfactory profit. I've reached a point where I don't have to take continuous pressure. That's all there is to it."

But was that all there was to it?

Within six months with the same facilities, the same employees, the same product, the new owner pushed up sales by 50% and stacked up commensurate gains in profits.

The ways he did this make fascinating and profitable reading. This is the kind of helpful, factual, idea-building reading you get in the monthly

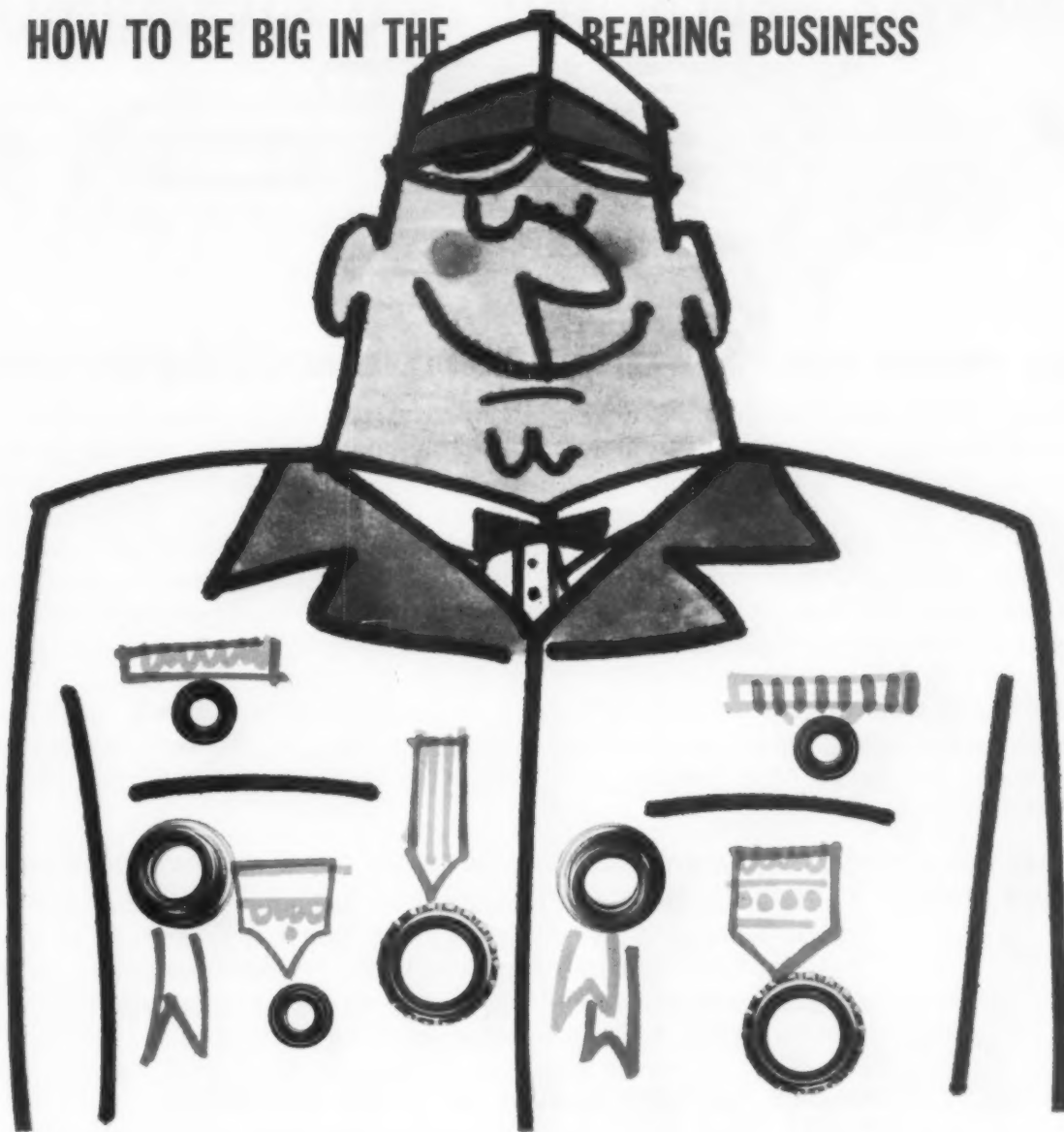
publication "*Profit Pointers*." Published by The Associates as a service for auto dealers.

If you'd like a copy of this meaty publication—just write us or contact your Associates representative, and we'll be delighted to put you on the list. It's free, of course—a part of the extra service we give at The Associates.

THE ASSOCIATES
INVESTMENT COMPANY • South Bend, Ind.
Associates Discount Corp. • Associates Discount
(Canada) Ltd. • Emmco Insurance Company



HOW TO BE BIG IN THE BEARING BUSINESS



New Departure and Hyatt make it easy and profitable for you to be the wheel bearing expert in your neighborhood. Here's all you do! Remind customers that for safe driving, front wheel bearings should be serviced every 10,000 miles; keep an assortment of New Departure Ball Bearings and Hyatt Tapered Roller Bearings on hand so you will have the bearings you need for replacements on any car . . . millions of cars are factory-equipped with them.

No special equipment or training is required for bearing installation. And this is a good time to inspect and sell new grease seals, brake parts, wheel alignment and balancing, shocks, suspension parts and tires.

Your United Motors Service supplier has New Departure and Hyatt wheel bearing assortments that provide bearings for all popular requirements. You can start in the front wheel bearing business with one of these assortments with a minimum initial stock investment. . . . Call your United Motors Service supplier today.

HYATT

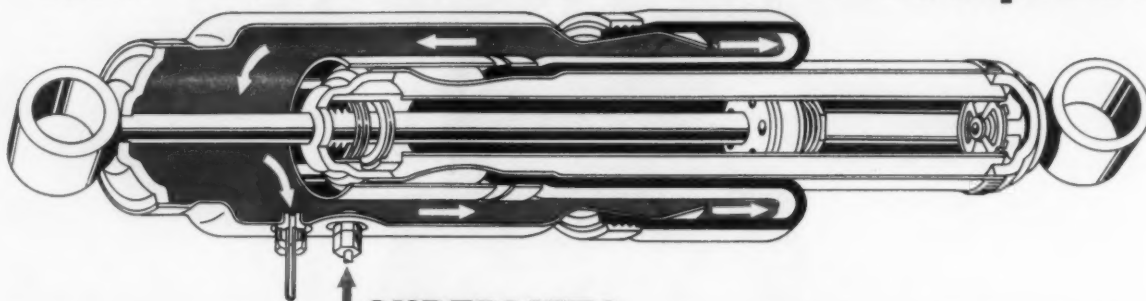


NEW DEPARTURE

quality bearings distributed through



Now—a shock line that's complete



SELL AMAZING NEW **SUPERLIFTS** TO LEVEL HEAVY REAR-END LOADS

You've never seen a load-compensating shock absorber like the new Superlift . . . and neither have your many customers who'll insist you install them pronto! Superlifts are ideal for the trailer owner, boat owner, salesman . . . and any drivers who carry extra loads in the trunk or rear seat. ■ You can assure every customer that Superlifts will keep his car smooth, safe and level under heavy rear-end loads. Superlift combines the famous, proved Superide Shock Absorber with a specially designed air chamber. It inflates in seconds to level the car with the load, deflates easily to keep it level when the load is removed. Both ways, the car stays level, gives a smooth, safe ride. And Superlifts are completely adjustable to satisfy a wide range of individual load requirements. ■ Superlifts have no metal springs to break, can't lose shock action through accidental air loss. You install them on the rear only, install Superides on the front if needed. Ask your wholesaler about his 90-day Money Back Trial offer.

These completely new Superlift sales features will pump up your shock sales—and profits!

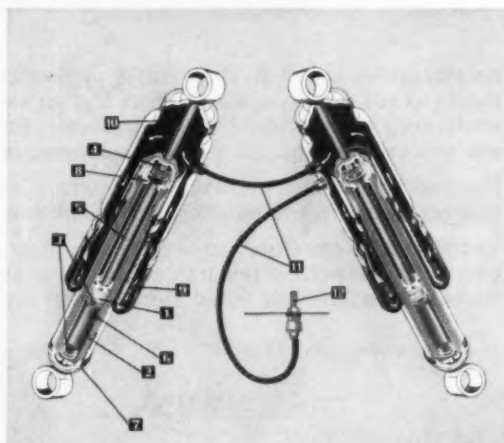
- Exclusive, balanced, integrated air system
- Can be installed with or without in-trunk inflation kit
- Superior ride characteristics
- Completely adjustable to extra loads
- Small inventory, broad coverage—just 13 numbers cover 80% of popular U.S. cars
- Simple part numbers
- Colorful, sales-building packaging

THESE EXTRA QUALITY FEATURES ASSURE SATISFIED CUSTOMERS, EXTRA PROFITS FOR YOU!

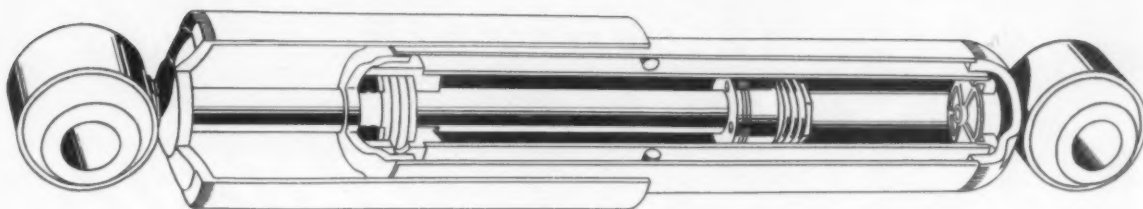
1 NYLON PISTON RING—Smoother bearing surface for long life. 2 "POSICONTROL" FLUID—Keeps load constant regardless of temperature changes. 3 "POSICONTROL" VALVES—Maintain best ride on all types of roads. 4 MULTI-LIP ROD SEAL—Double protection against fluid loss. 5 INDUCTION-HARDENED PISTON ROD—Polished high carbon steel. Extra strong, resists wear. 6 MIRROR-FINISHED CYLINDER—Precise dimensions and smooth bearing surface for long, dependable performance. 7 ALL-WELDED CONSTRUCTION—Greater durability, positive anti-leak sealing. 8 HIGH-PRECISION GUIDE BEARING—Assures accurate alignment, smooth, quiet operation. 9 AIR SPRING. 10 AIR CHAMBER. 11 NYLON TUBING*. 12 AIR FILL VALVE* (on Superlift only).

*Low-cost optional convenient trunk inflation kit.

BOTH SUPERLIFT AND SUPERIDE FEATURE THE NYLON-SKIRTED PISTON! Gives your customers a better ride longer. This unique nylon-skirted piston virtually eliminates scoring of cylinder walls; prevents fluid leakage past piston.



... and loaded with profits for you!



SELL SUPERIDE SHOCKS FOR NORMAL REPLACEMENT JOBS

For shock replacement that does not involve the heavy rear-end loads requiring Superlift, here's the perfect partner—Superide! And when you install Superlifts, check the front end, too, for a Superide sale. ■ Superides give you broad coverage with small inventory. Just 8 pairs cover approximately 53% of the cars on the road . . . 16 pairs cover 78%! In addition, Superide gives you a simplified three-digit numbering system, neat, attractive, well-marked packages, and all the merchandising help you need to cash in big . . . the best shock absorber deal in the business!

Look at the merchandising aids available to help you sell Superlift and Superide! Here's real customer-attracting material designed to boost your shock absorber business,

build sales and profits, too!

SHOCK



DISPLAY AND SERVICE CART—

All-steel, rolls on rubber tires; a complete "shock

department" that stocks, displays, sells.



SUPERLIFT SELLER'S GUIDE—Gives applications and sales features; fits under cart lid, on

wall or window.

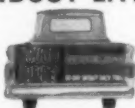


DEALER DECALS—Colorful, hard-selling display on window or lube bay door.



HANDOUT LITERATURE—Sells customers the need for new absorbers while you're

busy elsewhere.



TAILGATE BANNER—A shock "traveling salesman."



POINT-

OF-PURCHASE DISPLAY—Aimed at Superlift prospects.



DRUM WRAPPER—Shows customers

where old shocks belong.



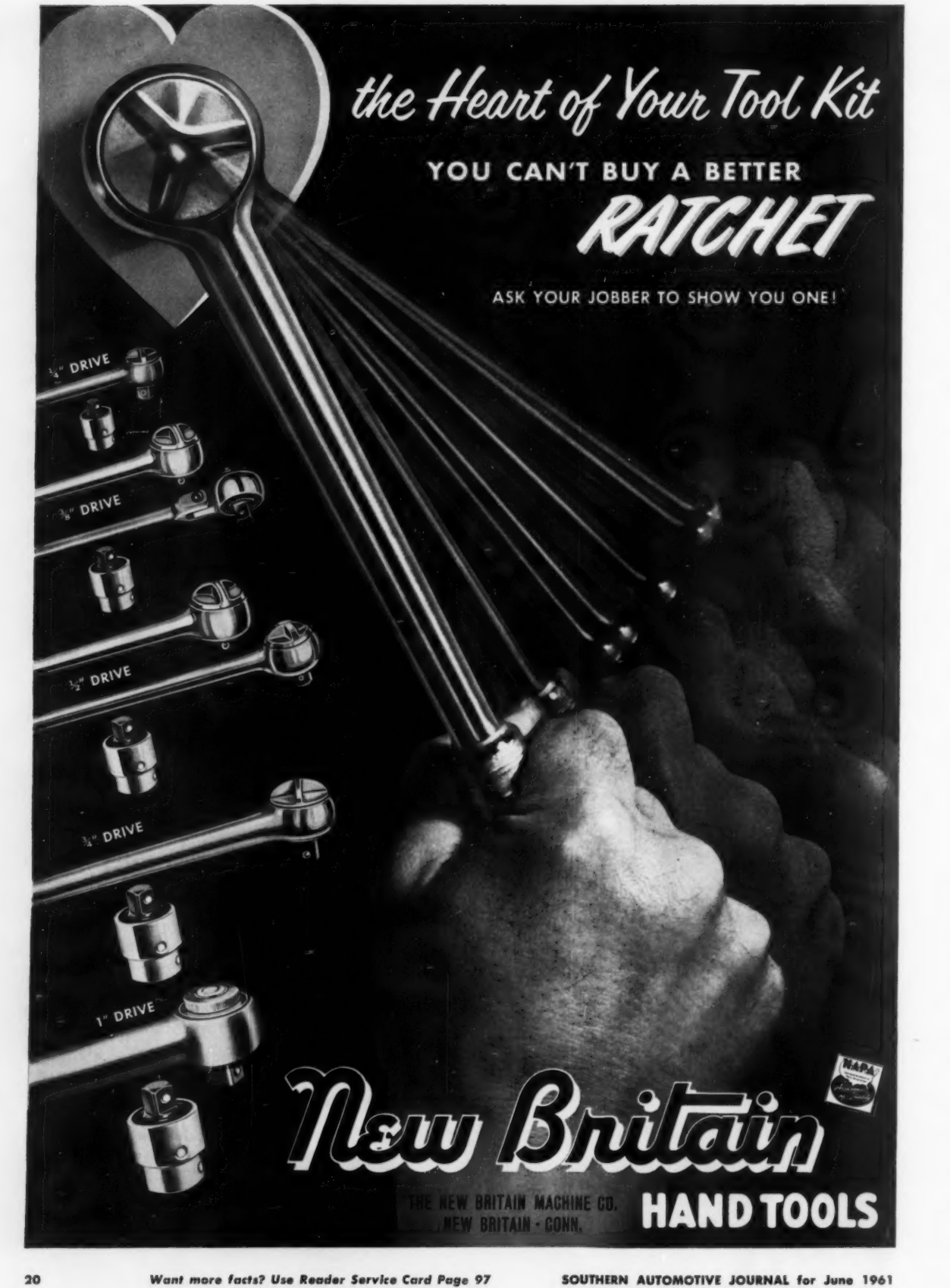
SERVICE TOOL—Makes it easy to remove, replace bayonet types.

At last—a line that puts you on the road to profitable shock absorber business in a really big way—with a minimum investment! New Superlift for heavy rear-end loads—Superide for normal replacement jobs—plus national advertising and merchandising help for you to tie in with it. A combination stock lets you get all the profit opportunities. Call your United Motors parts supplier for the whole story!

Products of General Motors, distributed through **UNITED MOTORS SERVICE**



Watch for Superlift and Superide advertising in The SATURDAY EVENING POST



the Heart of Your Tool Kit

YOU CAN'T BUY A BETTER

RATCHET

ASK YOUR JOBBER TO SHOW YOU ONE!

New Britain

THE NEW BRITAIN MACHINE CO.
NEW BRITAIN - CONN.

HAND TOOLS





Wheel Cylinders have 'dog days', too!

when the heat is on...
**EIS Wheel Cylinders stand up
because they're equipped with
'E' Series HRC* Cups,
Expanders and Springs!**

Smaller drums and faster braking create high temperature conditions that shorten wheel cylinder life. Beat the heat by installing EIS Wheel Cylinders with the built-in "E" Series *HEAT-RESISTANT-COMPOUND Cups! These specially formulated EIS Cups provide a positive, longer-lasting seal. And, for extra insurance, the Expanders and Springs provide just the right pressure needed at the point of contact between cups and cylinder wall. Every EIS Wheel Cylinder has this extra safety factor... and it doesn't cost a penny extra!



"E" Series *HRC Cups with Expanders and Springs are also available in Shop-Size Cabinet Assortments and in Standard-Ten-Paks. Use them in **ALL** your brake work... they work better!

The new, EIS Catalog Supplement 30H-11 is ready. Make sure you get your copy because it includes a complete, up-to-date listing of 1961 Model applications.



*Highly efficient at -40°F., too!

Write for catalog

EIS AUTOMOTIVE CORP., Middletown, Conn.

ANNOUNCING THE PHENOMENAL

BIG STOP

ABSOLUTELY PLUS 3 YEAR



MOUNTAIN MASTER brake materials are tested in the laboratory and continuously over the highways with Lasco's own test fleet.

Yes, we said **NO FADE!** MOUNTAIN MASTER ENGINEERS, with a phenomenal break-through in brake lining chemistry and compounding, move still farther out in front of all competition. A brake lining that positively will not fade, yes, we said no fade and continue the MOUNTAIN MASTER 3 YEAR GUARANTEE! Beautiful brake performance... you don't know what beautiful brake performance is until you drive a car or truck equipped with MOUNTAIN MASTER.

... Stop abruptly!!! Set the car on its nose if you must, but never a grab or pull, or a rough stop. Do it all day long and always the same beautiful performance. Ride the pedal down the mountain until the brakes smoke and never a sign of brake fade with "Big-Stop" phenomenal formula MOUNTAIN MASTER

...and remember we said **NO FADE.** Make no mistake about it, "Patented" MOUNTAIN MASTER is the finest name in the world in brake lining.

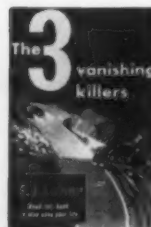


BIG-STOP

THERE IS NO "JUST AS GOOD"
Lasco invites any and all competitive brake block manufacturers to test BIG STOP FORMULA MOUNTAIN MASTER for durability, dependability, performance and economy.
There is no "just as good"—or a brake block made in the world that is as tough. Try it—make your own test, drill or grind BIG STOP.

FREE BOOKLET

"THE 3 VANISHING KILLERS"
FOR YOU AND YOUR CUSTOMERS!
Colorful 40 page book written by expert brake engineer. Tells all about brake fade and real killer: secondary brake fade. Tells how brake lining is made and how to tell a quality product from the cheap and dangerous! Write for your free copy today!



LAHER ELECTRIC CARS, TRUCKS, LIFTS



Laher Delivery—with plastic cab, carries up to 1400 lbs.

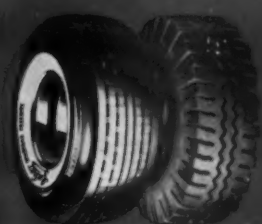


Laher Four-Wheel Lift—perfect for car and truck maintenance garages—lifts to 1500 lbs.

Laher "all-purpose" truck and nurseryman—toughest, most versatile electric truck made.



LAHER MUSTANG TIRES



Every type and size for passenger cars, trucks and equipment.

OTHER PRODUCTS

BREAK-THROUGH FORMULA! NO FADE! GUARANTEE

IN PASSENGER CAR USE



BRAKE SHOE RELINERS GROW WITH LASCO: Are you a bonder that is losing money to Lasco MOUNTAIN MASTER quality?...then why not go to MOUNTAIN MASTER quality? Lasco passenger car shoe exchanges are available in bonded or riveted sets using same supreme quality lining in three grades: MOUNTAIN MASTER, BLUE LABEL and BRAKE MASTER. TRY IT—it will make you friends and money.



NOW AVAILABLE — COMPLETE BRAKE SERVICE MANUAL

The most complete and up-to-date manual in existence — 320 pages — manual is a complete picture-story of all brake systems — designed to tell, show and train mechanics to apply brakes to all cars 1950-1961. Every step of operation is described and pictured — also tells how you can get into the \$427,000,000 brake service business. Write today for information on how you can obtain your free copy!



ORDER NOW...

LASCO BRAKE PRODUCTS CORP., LTD.

A SUBSIDIARY OF LAHER SPRING AND ELECTRIC CAR CORP.
Oakland, 2615 Magnolia St. • Memphis, 300 Madison Ave. • Kansas City, 5000 East 40 Terrace • St. Louis, 3041 Olive St. • Los Angeles, 807 E. 8th St. • Fort Worth, 917 Florence St. • San Francisco, 98 12th St. • Salt Lake City, 541 So. State St. • Seattle, 714 E. Pike St. Portland, N.W. 15th and Davis • Spokane, 1319 W. Second Ave. Sacramento, 1616 L St. • New Albany, Mississippi

LAHER BATTERIES

FOR ALL CARS, TRUCKS,
ELECTRIC CARS!



EVERY LAHER BATTERY IS A SALESMAN!

"Sell the Battery that Sells Itself . . . On Sight!"

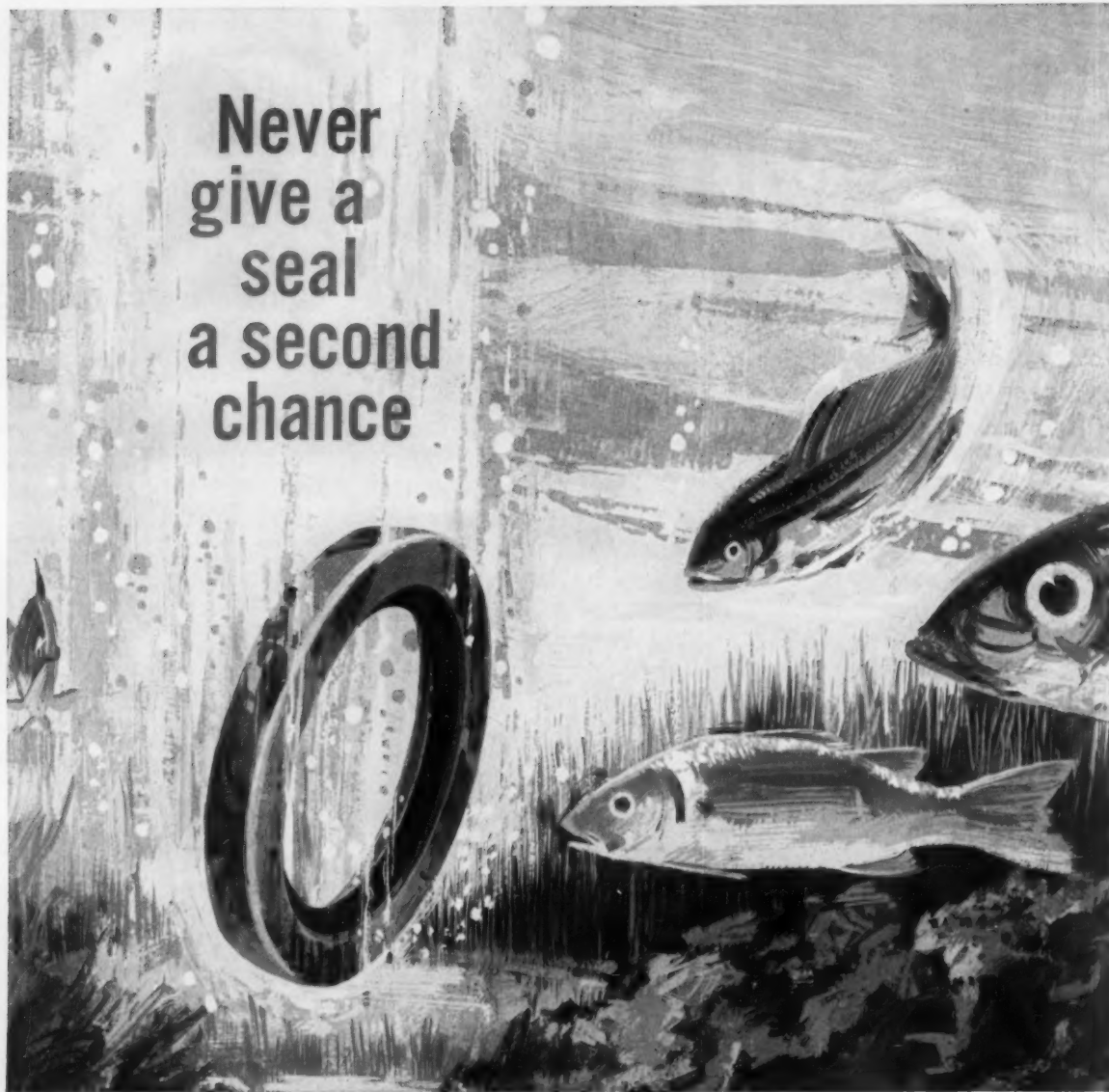
LAHER SPRINGS & OVERLOAD SPRINGS



Original equipment and replacement springs for all cars and trucks. Overloads to fit any make and model car or truck.

OTHER PRODUCTS

**Never
give a
seal
a second
chance**



Replace with National—the only line that can match any seal you pull!

Why risk damage to bearings and other vital parts? Whenever you pull a seal, replace with National. With the most complete line, you'll virtually eliminate the problem of getting odd-size replacements. Satisfied customers will bring repeat business.

National Oil Seals come in Micro-Torc leather®, which is specially processed for protection against

seepage; and Syntech rubber compounds, which meet the changing requirements of automotive applications. Quality and availability—these are the reasons why all U.S. car and truck manufacturers use Nationals as original equipment . . . why *you* should, too!

Your National Seal jobber offers fast service on the seals to fit your needs. Call him today!



NATIONAL OIL SEALS

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



Select-Air Regulator gives finger-tip adjustment of torques from 20 to 130 ft. lbs. on Size 403B, 1/2" Drive Impactool.



exclusive
I-R's BUILT-IN AIR CONTROL
...gives you finger-tip control

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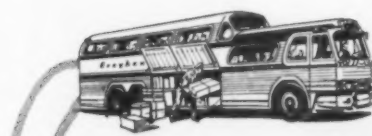


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From left to right: Milton Cross, the "Voice of Opera" — and announcer for Texaco's Metropolitan Opera Broadcasts; Chet Huntley, famous newscaster of the Texaco Huntley-Brinkley Report; Marion J. Epley, Jr.,

Senior Vice President of Texaco Inc., at the luncheon meeting of the Radio and Television Executives Society of New York, April 18, 1961 — when presentations were made of the highly coveted Peabody Awards.

Texaco News and Opera programs win Peabody Awards!

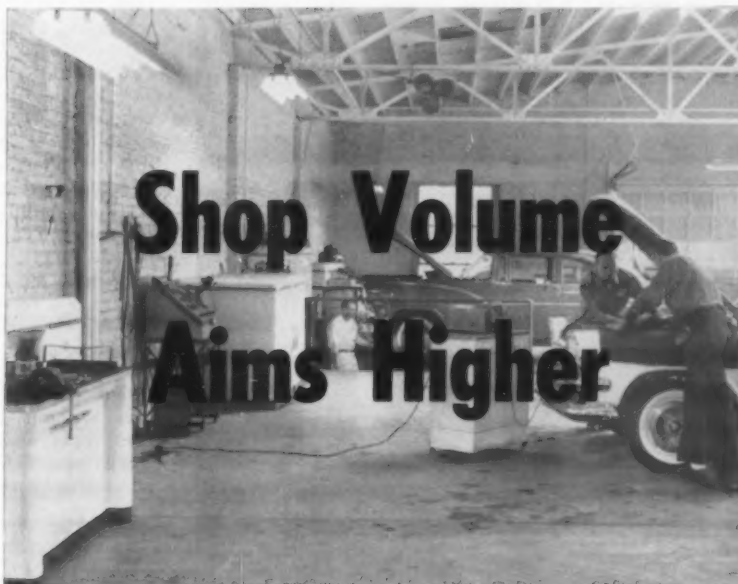
BOTH the Texaco Huntley-Brinkley Report (TV) and Texaco's Metropolitan Opera Broadcasts (radio) receive the coveted George Foster Peabody Awards! This is the first time that two regularly-scheduled programs, sponsored by the same organization, have been winners in the same year.

Chet Huntley, shown above, accepts the Peabody Award for the best television news program of 1960. Mr. Epley of Texaco accepts the Peabody Award for the Texaco-Metropolitan Opera Radio

Network — for outstanding public service — 1960.

Administered by the University of Georgia, the Peabody Awards are widely considered the most significant of all citations for excellence in the broadcasting industry.

We are proud to be the sponsor of two award-winning programs. But even more satisfying is the fact that both programs are remarkably successful in building more friends and more sales for Dealers, Consignees and Distributors of **TEXACO**



By **BILL HERBERT**
Editor

SHOP VOLUME this year is expected to do quite well.

That's the easy conclusion from replies to a questionnaire mailed to 800 garagemen and franchised car dealers, plus some of the larger service stations, last month.

Tabulations of the replies showed:

Forty-three per cent expect the same volume as for 1960 and 35% are looking for a rise, generally around ten to 15%.

Twenty-two per cent anticipate a downturn.

As for the results thusfar this year, the respondents revealed:

Twenty-eight per cent have experienced an increase in shop volume and 30% listed the same amount.

Forty-two per cent said their shop business was lower, due to factors as unemployment and slackened activity in such industries as building (lumber) and textiles.

From these figures you can see that while 58% have chalked up the same or higher business for the year registered, 78% are counting on the entire year registering the same or higher volume, which is in line with recent indications in many industries that the recession bottomed out somewhere around March 1.

The gradual lifting of hourly labor rates has been continuing. Around a third of the answers showed higher rates inaugurated within the last two years, including a heavy sprinkling who have adjusted charges upward since January 1.

Where higher shop volume was indicated, in many cases it was attributed to "old customers not buying new cars," as it was put by Roy L. McKaig of Mac's Garage, Paola, Kan.

"Less sales of new cars and repairing more old cars" was the way it was expressed by J. L. Holman of Holman Bros. Motor Co. (Chrysler-Plymouth-Valiant), Honey Grove, Texas.

"New-car sales less, repair more," reported Joe B. Royal of Joe Royal Chevrolet Co., Lonoke, Ark.

Volume was up 10.4% at Muldon Motor Co. (Ford), Pensacola, Fla., and Frank E. Welles attributed it to the installation of eight twin-post lifts.

Expansion of the body shop helped lift volume by 8% at Presto Automotive, Baltimore, Md., said Michael Jacobson, although he figured that otherwise his sales were down around six per cent.

C. W. Burke of Burke Auto Repairs, Burlington, N.C., said his business was greater because of "more cars and less young men taking up the trade."

Designed to Be Convenient and

WHEN a man spends 31 years in garage service and operation he develops a clear idea about the kind of facilities he ought to have and the facilities he wishes he didn't have.

Especially if he has been operating a business in a building that has too much of one and not enough of the other.

It was this kind of experience that

By **ROSS L. HOLMAN**

evolved into the present Tom Polk Tire Service and the kind of plant that makes this business tick at Nashville, Tenn.

The building and equipment that now represent the cherished Tom Polk dream of many years was completed in 1959. It has the facilities

for practically every kind of automotive repair and servicing except body and fender work. Tom bought the latest modern equipment available at the time and designed a building that brought spectating garage managers from other parts of the South to study the plant in the light of their own needs.

While the title of the Tom Polk Tire Service implies a definite concentration on tire service, the activity in general automotive repair is just as important and just as much. All the retreading and other tire work are done in a separate building just across an alley from the new garage shop.

As seen by the diagram, the new garage is a rectangular building 100' by 40'. Polk says that one of the most important advantages provided by this plant is the ease with which his mechanics can maneuver the cars without bumping into other cars, tools, workmen and the other things essential to the operation of a successful garage.

Ample Car-Entrance Space

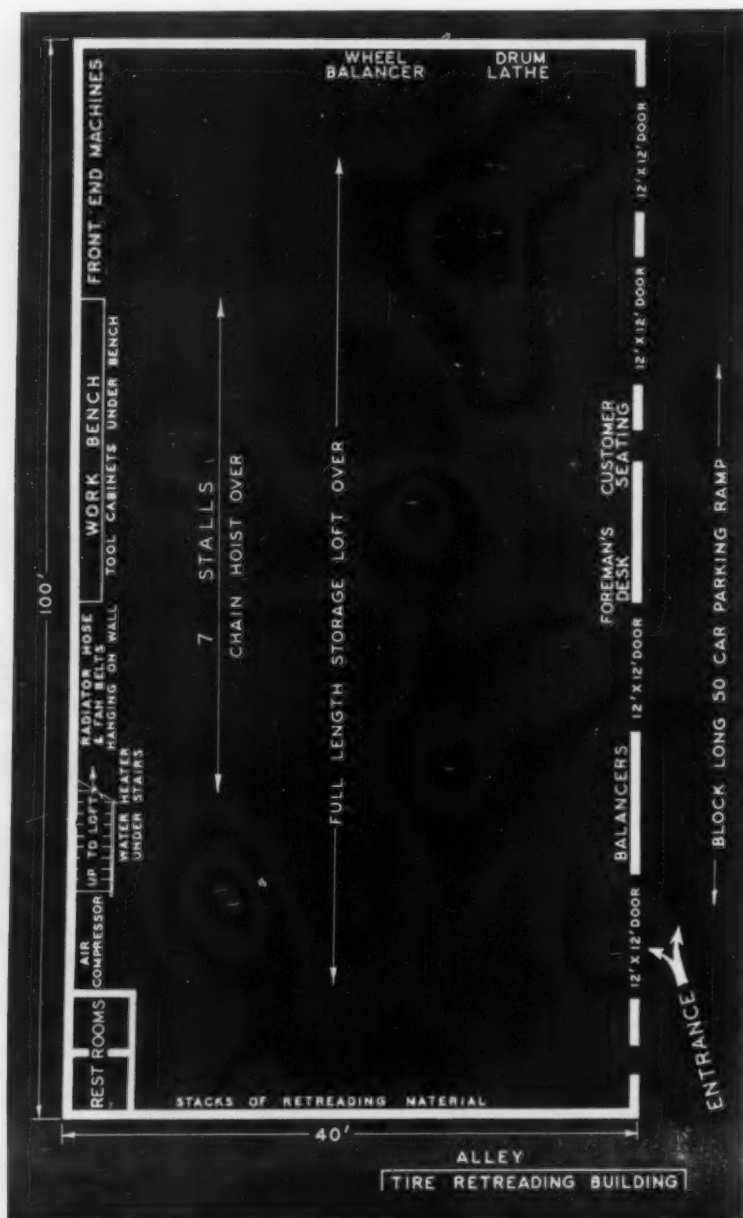
In the first place, there are four 12'-by-12' doors on the long side facing the street. This means that nearly half the lineal footage of this side is composed of car entrances with plenty of maneuvering space to get in and out of the building, saving much wriggling and squirming.

The entire building is devoted to shop operations. The regular office is in the tire building across the alley.

All of the working equipment of the shop is on the side opposite the door entrances and on one end. There is room for seven work stalls on the working side. Whenever a vehicle is to be driven up to the equipment on the far side, to the workbench or to other areas, it enters one of the four doors that immediately faces the spot to be reached. When the job is finished, the car can be backed out the door immediately behind it.

The center is kept clear and Polk says that a bottleneck on getting in and out is so seldom as to be almost non-existent. Even when a car is on the front-end machine there is room for another car to drive through the door immediately behind the equipment.

Immediately in front of the shop is a 60'-by-166' parking lot. Thus, when a finished car backs out of the shop through one of the four doors there is plenty of clear, outside space



Uncrowded

into which to back. There's enough room in this lot and on other parts of the premises to park 50 customer cars without blocking any of the doorways or outside driveways.

It can be seen from the floor plan there are two front-end machines of the latest models on the work side of the shop. Polk has been getting enough wheel alignment to keep both these machines busy. The ease with which these machines can be reached and backed away from has encouraged much of this patronage.

About midway the work side is a spacious row of tool cabinets in which practically all smaller tools are kept stored in specific sections. They are floor cabinets of equal height, the broad top of which is a workbench. Thus, when a car is being worked over in front of this workbench it is easy for the mechanic to reach into a cabinet below

Another in Garage Series

This is another in the popular series of features, with blueprints, on shop buildings proven by actual use to be well-designed for the shape lot which they occupy.

the bench for any needed tool or part. Radiator hose, fan belts, etc., are hanging on the wall adjoining the workbench.

One thing that impresses a car owner on entering the shop is a clean, almost spotless floor. This gives the shop an inviting appearance, especially to lady customers. There is no regular cleaning man on the payroll. Every mechanic who works on a vehicle cleans up his own debris and is cautioned not to let it accumulate.

In order to facilitate cleanliness this Tennessean keeps the floor painted with a grease-resistant paint. Hence it requires very little of a mechanic's time to keep his corner clean.

In addition to labor-saving equipment the shop was designed to give the employees complete comfort in carrying out their responsibilities. For winter use there are two overhead gas heaters of 205,000btu each.

There are three rows of fluorescent



lights that provide ample light vision.

"No matter how minute the job," says Tommy Warren, the shop foreman, "the mechanic can perform every task without the use of a drop light."

Besides having plenty of outside parking space, the shop provides several comfortable seats and a clean area for waiting customers. In addition to the four car-entrance doors there are also two small doors on the same side for walk-in customers.

With reference to the car doors, Polk says there is only one thing he would change about them if he were to do the job over. They are wide enough already, but he would make them at least 14' high instead of 12

as at present so larger loaded trucks could get in without difficulty for servicing.

This up-to-date plant has received a lot of publicity with a one-minute television spot aired a number of times each week. The TV tape shows a clear image of the shop, its four door entrances and the inscriptions above the doors indicating the services offered the public. The tape presents a perfect image of Tom Polk himself, who tells his story in his own voice to the TV audience.

"This TV spot has personalized me to my trade as nothing else could do," he says. "My customers and prospects see me in a manner that looks almost like I am talking to each one face-to-face."



TorqueFlite Six Transmission

GROWING reader inquiries show an expanding interest in all sorts of automatic transmissions. It's not possible to cover the field adequately in a few pages, so in the months ahead you'll be finding various units penned out for your information. This time let's scrutinize Chrysler Corp.'s TorqueFlite six.

This transmission is used on the Plymouth and Dart sixes and the Valiant and Lancer.

It combines a torque converter with a fully-automatic three-speed gear system (Fig. 1). The torque converter housing and transmission case are an integral aluminum casting.

The transmission consists of two multiple disc clutches, an overrunning clutch, two servos and bands, and two planetary gear sets to provide three forward ratios and a reverse ratio.

The common sun gear of the planetary gear sets is connected to the front clutch by a driving shell which is splined to the sun gear and to the front clutch retainer.

The hydraulic system consists of a front and rear pump, and a single valve body which contains all of the valves except the governor valve.

The torque converter is attached to the crankshaft through a flexible

By E. M. LOWERY

Technical Editor



driving plate. Cooling of the converter is accomplished by circulating the transmission fluid through an oil-to-water-type cooler, located in the radiator lower tank. The torque converter assembly is a sealed unit which cannot be disassembled. Dirt may be removed by flushing.

The transmission is operated by a gearshift control unit consisting of five pushbuttons, identified by R (reverse), N (neutral), D (drive),

2 (second) and 1 (low).

In the drive range, the transmission shifts through all three gear ratios automatically. Shift points are determined by throttle opening and car speed. If additional acceleration is desired while in drive range, the transmission will downshift (depending on vehicle speed) to second gear or breakaway automatically when the accelerator pedal is completely depressed.

The intermediate or second position range is used to operate the transmission in the first two gears only. This range is suitable for heavy city traffic where the driver may desire part-throttle second gear operation for more precise control. It may also be used on long down grades where additional engine braking is needed.

A low or first position range is also available to keep the transmission in first gear only. The position provides added handling ease in mountain driving and exceptional pulling qualities in sand and snow.

Engine torque is transmitted to the torque converter through the input shaft to the multiple disc clutches in the transmission. The power flow depends on the application of the clutches and bands. A compound planetary gear system

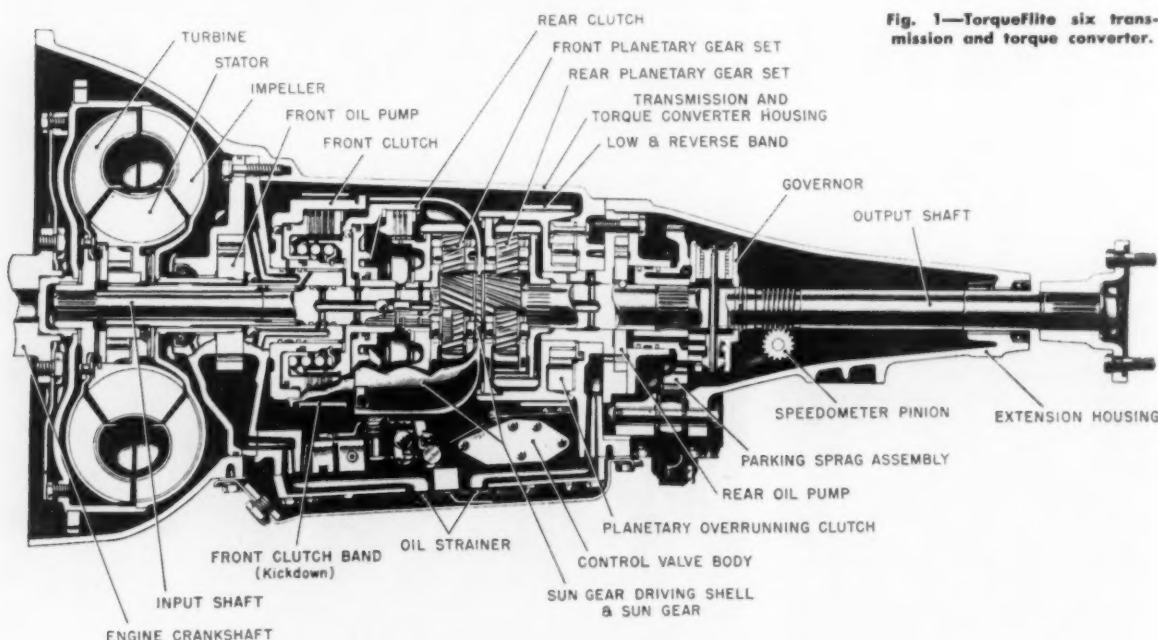


Fig. 1—TorqueFlite six transmission and torque converter.

provides neutral, low, second, drive and reverse ranges. All references to direction of rotation in the following items is described as viewed from the front of transmission.

When control unit is in the N (neutral) position, none of the clutches is engaged or bands applied. Therefore, no power is transmitted to the output shaft.

In D (drive) position, the front and rear clutches are engaged, while front and rear bands are released (Fig. 2).

With both clutches engaged and both bands released, the front planetary pinions cannot rotate. Therefore, the front planetary cage (splined to output shaft) rotates the output shaft at the same speed as the input shaft, thus obtaining direct drive.

In 2 (second) position, the rear clutch is engaged, to drive the front annulus gear, pinions and sun gear. At the same time, the front band is applied, holding the front clutch, driving shell and sun gear stationary (Fig. 3).

With rear clutch engaged, the clutch, front annulus gear and front planetary pinions all rotate clockwise. The applied front band holds the driving shell and sun gear from turning. Therefore, with sun gear held stationary, the planet pinions roll (clockwise) around the sun gear, turning the front planetary cage (splined to output shaft) in the same direction at a reduced speed.

In 1 (low) position, the rear clutch is engaged and drives the front annulus gear, front planetary pinions and the sun gear. The low and reverse drum and rear planetary

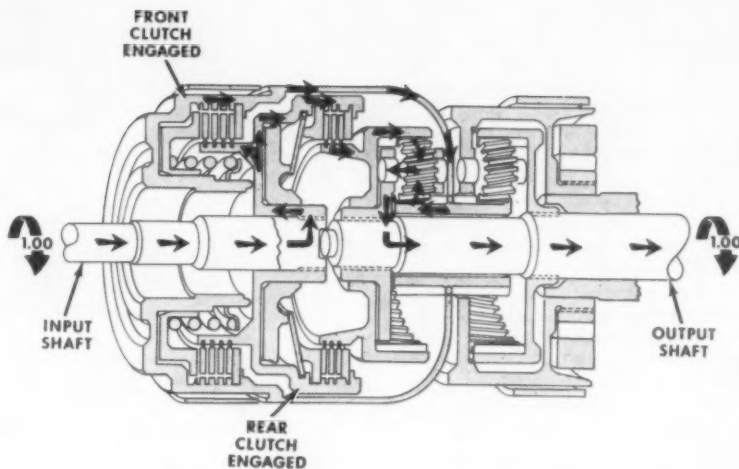


Fig. 2—Power flow in D (drive) position—direct.

cage are held stationary by the rear band (Fig. 4).

With rear clutch engaged, the clutch, front annulus gear and front planetary pinions all rotate clockwise, which turns the sun gear counterclockwise. With the rear planetary cage held stationary, the sun gear (rotating counterclockwise), rotates the rear planet pinions clockwise, which turns rear annulus gear (splined to output shaft) in the same direction at a reduced speed.

In R (reverse) position, the front clutch is engaged to drive the driving shell and the sun gear. The low and reverse drum and rear planetary cage are held stationary by the rear band (Fig. 5).

With front clutch engaged, the

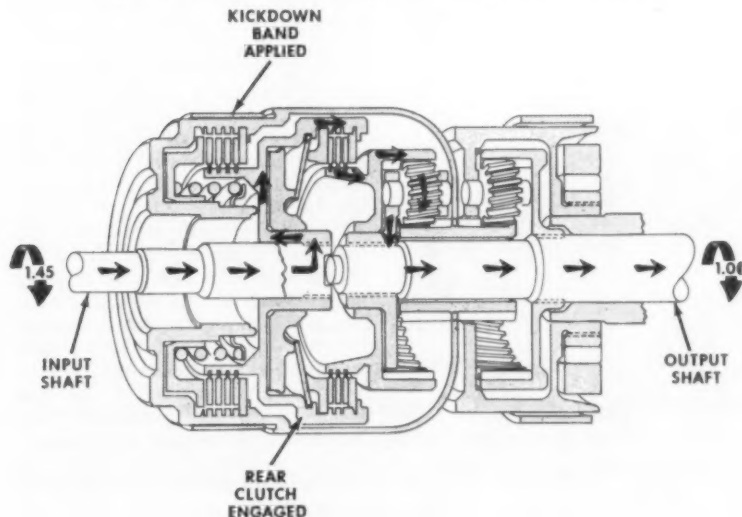
clutch, driving shell and sun gear all rotate clockwise. With the rear planetary cage held stationary, the sun gear (rotating clockwise) rotates rear planet pinions counterclockwise, which turns the rear annulus gear (splined to output shaft) in the reverse direction at a reduced speed.

With car standing, engine operating and the D (drive) button depressed, the phase of operation is known as "breakaway." Breakaway simply means that to get the vehicle moving from a standstill, the lowest forward ratio is used. Therefore, at this time, the rear clutch is engaged which drives the front annulus gear, front planetary pinions and the sun gear. The rear planetary cage is prevented from turning counterclockwise by the overrunning clutch (Fig. 6).

The operation of the overrunning clutch can be compared with the coaster brake on a bicycle. When reverse torque is applied to the rear planetary cage, low and reverse drum, and clutch hub, the clutch rollers are forced into a wedged contact by the ramps in the cam, thus holding the planetary cage stationary. When the reverse torque is removed, the rollers are released from their wedging contacts on the ramps, and the overrunning clutch will coast.

With the rear clutch engaged, the clutch, front annulus gear and front planetary pinions all rotate clockwise, which turns the sun gear counterclockwise. The sun gear tends to rotate the rear planetary cage and drum counterclockwise, which is immediately locked by the overrunning clutch. With the rear planetary cage held stationary, the sun gear

Fig. 3—Power flow in D (drive) position—second or kickdown.



(rotating counterclockwise) rotates the rear planet pinions clockwise, which turns rear annulus gear (splined to output shaft) in the same direction at low range ratio.

In kickdown from D (drive) position, the transmission shifts back to the same power flow as outlined for 2 (Fig. 3).

In kickdown from 2 (second) position, the transmission shifts back to the same power flow as outlined for "low." However, at this time the low and reverse drum and rear planetary cage are held stationary by the overrunning clutch instead of the rear band (Fig. 6).

When retarding in 1 (low) position, the low and reverse drum and rear planetary cage are held stationary by the low and reverse band to provide engine braking (Fig. 4).

Hydraulic control system:

The hydraulic control system has four important functions to perform.

In a general way, the components of any automatic control system may be grouped into the following basic components or units:

The pressure supply system, the clutches and band servos, the pressure regulating valves and the flow control valves.

Taking each of these basic components or units in turn, the control system may be described as follows:

Pressure supply system (Fig. 7):

Under all normal operating conditions (up to a forward speed of approximately 35mph) the front pump, driven at engine speed, provides oil needed for torque converter pressure, control pressures and lubrication.

The front pump delivers oil at pressures ranging from 55psi at

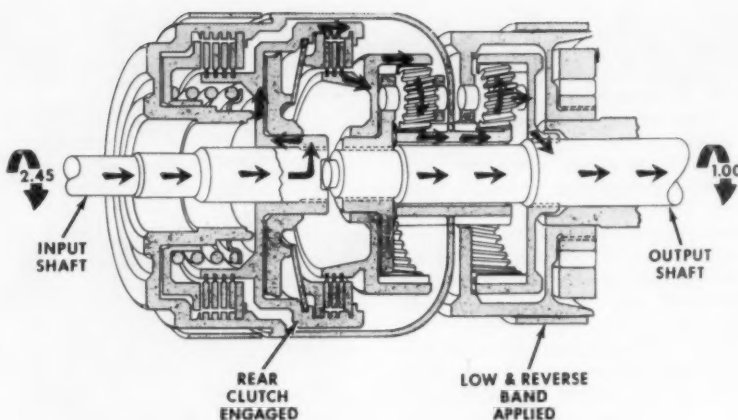


Fig. 4—Power flow in 1 (low) position—low and retarding.

closed throttle to 90psi at wide-open throttle. In reverse, the front pump pressure is increased approximately 250psi in order to handle the high torque loads imposed during reverse operation.

The rear pump (smaller than the front pump and driven by the output shaft) furnishes all of the oil required by the transmission in normal driving at all vehicle speeds above approximately 35mph. The rear clutch and low-reverse band are applied by the oil pressure developed by the rear pump when the engine is started by pushing.

Clutches and band servos (Fig. 7):

The front clutch contains four steel plates and four discs in order to develop the required capacity. Both front and rear clutches are engaged to transmit full engine and converter torque in direct drive. The front clutch is also engaged to drive

the car in reverse.

The front clutch piston is moved hydraulically to engage the multiple clutch plates and discs, and is released by means of the clutch piston return spring when hydraulic pressure is released.

The rear clutch contains two steel plates and three discs and a spring-washer-type return spring and is engaged in all forward driving ranges. The rear clutch is disengaged during reverse operation.

Hydraulic pressure against the rear clutch piston moves the piston into contact with the spring washer, which multiplies the force to lock the clutch plates together. The spring washer returns the clutch to "disengaged" position when hydraulic pressure is released.

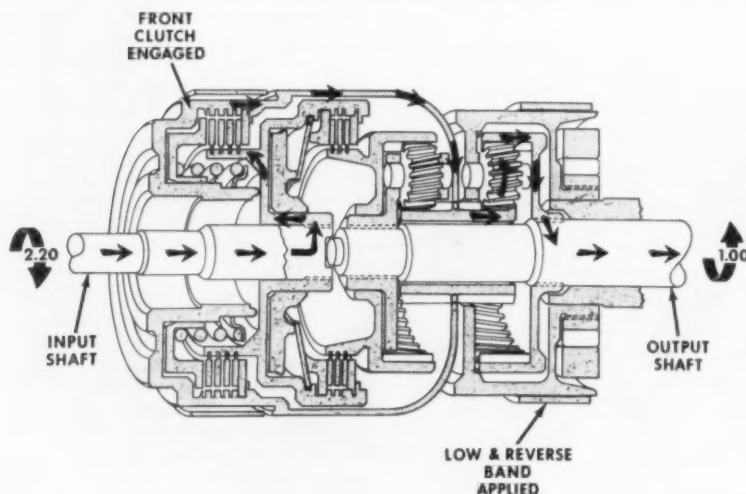
The kickdown position actuates the kickdown band through the kickdown lever, strut and anchor holding the front clutch piston retainer, driving shell and sun gear stationary. The result is a reduced forward ratio through the front planetary gear set.

The kickdown piston is hydraulically applied by a variable pressure which is a function of line pressure. The kickdown piston is released by spring tension or spring tension with hydraulic pressure, depending upon the operation.

The low-reverse servo has two functions which are performed independently. The low-reverse servo piston is moved hydraulically to apply the low-reverse band through the low-reverse band lever, strut and anchor. The results are:

To hold the carrier of the rear planetary gear set stationary while the front clutch (applied) drives the sun gear. This provides a reverse ratio of 2.20 to 1 through the front planetary gear set.

Fig. 5—Power flow in R (reverse) position.



Hold the carrier of the rear planetary gear set stationary while the rear clutch (applied) drives the sun gear. This provides the 1 (low) range operation at a ratio of 2.45 to 1 through the front planetary gear set which may be used for engine braking. Initial engagement for the low-reverse servo (when shifting from neutral to low or reverse) is softened by compression of the low-reverse servo cushion spring.

The servo piston is released by a return spring when the source of apply pressure is discontinued.

The accumulator cushions the application of the kickdown band in the upshift from breakaway to second. It is connected in parallel and to the passage which supplies line pressure to the apply side of the kickdown servo.

In neutral and reverse the accumulator piston is held released by the accumulator spring, there being no pressure to the piston at these times.

Pressure regulating valves (Fig. 7):

The regulator valve controls line pressure at a valve dependent on the throttle opening, and it ranges from 55psi at a closed throttle to 90psi at wide-open throttle.

For reverse operation, oil must be at a pressure of 230 to 280psi. This is accomplished by switching the effective reaction area of the regulator valve, with the result that a line pressure of 230 to 280psi, applied to the smaller reaction area, is required to overcome the force of the regulator valve spring.

The torque converter control valve maintains an oil pressure of approximately 30psi within the torque converter. When the torque converter pressure rises to 30psi, the control valve will move against the spring load and allow oil to flow through the cooler, then back to the lubrication circuit. From the cooler, oil is routed through the transmission lubrication system to lubricate the gear train at approximately five to 25psi pressure.

The governor valve assembly transmits a hydraulic pressure to the transmission which is proportional to car speed. This governed pres-

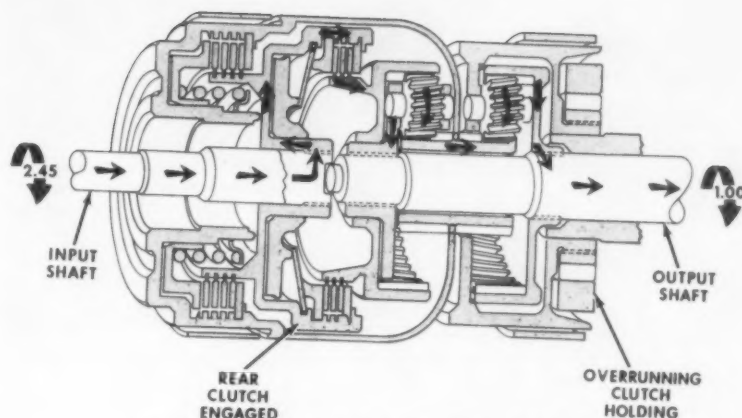


Fig. 6—Power flow in D (drive) position—breakaway.

sure, in conjunction with throttle pressure, controls upshift and downshift speeds. The governor is so mounted on the output shaft that when the output shaft rotates, the governor weight assembly exerts a centrifugal force on the governor shaft. The governor shaft transmits this force to the governor valve.

Oil is allowed to flow from the line pressure port to the governor pressure port, building up pressure in the governor circuit and against the valve reaction area sufficient to balance the centrifugal force of the weight.

The greater the vehicle speed, the greater is the centrifugal force of the weights, and hence the greater the governor pressure necessary to balance the centrifugal force. If the vehicle speed decreases, the decrease in centrifugal force allows the valve to move out slightly, venting excess oil and bringing the governor once more in balance at a somewhat lower pressure.

The governor weight assembly is constructed so that for vehicle speeds under approximately 25mph, both weights act as a unit, with the result that small changes in vehicle speed result in comparatively large changes in centrifugal force and governor pressure.

Above approximately 25mph, the primary weight moves outward against the pre-load of the spring and bottoms against the snap ring,

leaving only the secondary weight active. Small variations in vehicle speed above approximately 25mph, therefore, result in only small variations in governor pressure.

The throttle valve assembly transmits a hydraulic pressure to the transmission which is proportional to the amount of throttle opening. The throttle valve lever shaft is rotated in proportion to the amount of throttle opening of the carburetor by a linkage connecting the throttle valve lever shaft to the car's throttle linkage. The throttle valve lever shaft positions the kickdown valve and throttle valve spring in accordance with the amount of carburetor throttle opening, the spring being free (no load) at closed throttle and compressed at wide-open throttle. Therefore, the throttle valve spring exerts a force on the throttle valve that increases with carburetor throttle opening.

Throttle pressure will vary with the amount of carburetor throttle opening from a value of 0 (zero) pressure at closed throttle to a value of approximately 90psi at wide-open throttle.

Flow control valves (Fig. 7):

The front pump check valve is situated in the valve body. The valve is opened when front pump is supplying operating pressure and is closed when rear pump is supplying the pressure.

The rear pump check valve is situated in the transfer plate. The valve is opened when rear pump is supplying operating pressure and is closed when front pump is supplying the pressure.

The manual valve obtains the different transmission drive ranges as selected by the vehicle operator. The valve is moved by a cable which is connected to the pushbutton control unit on the instrument panel. It is

July: Tips on Summer Tune-Up

Summer brings some problems of its own, so you will see here next month an article covering items whose neglect causes poor engine performance on hot days.

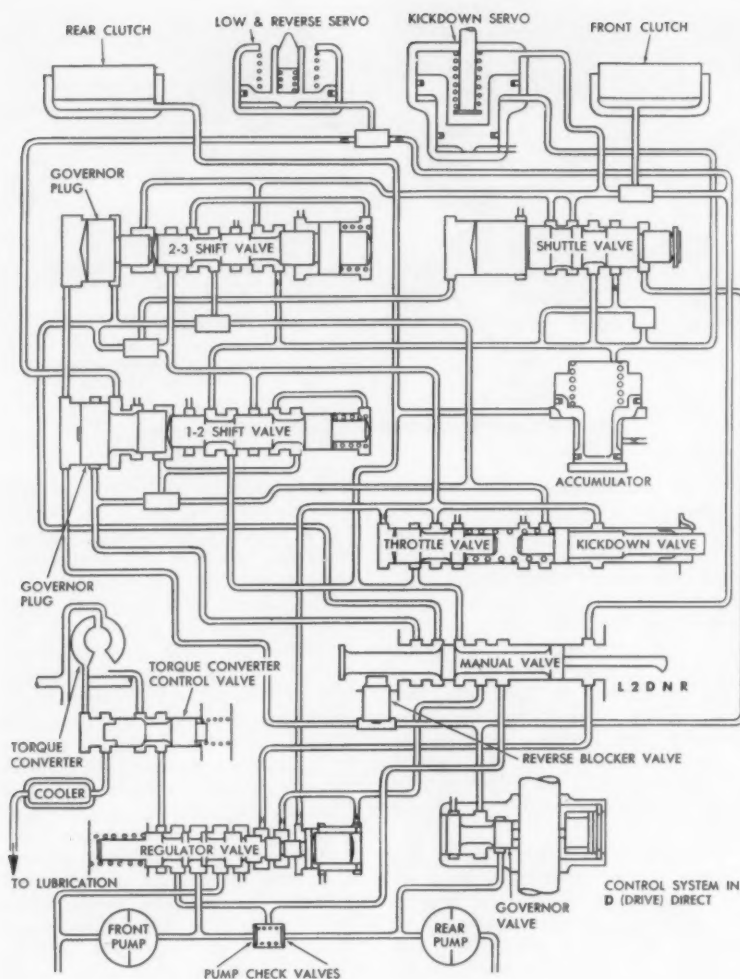


Fig. 7—Hydraulic control system.

held in these positions by the force of a spring-loaded detent ball on the valve body.

The manual valve distributes fluid pressure to various clutches, servos and other valves to apply clutches and servos automatically, dependent on car speed and throttle opening.

The reverse blocker valve mechanically blocks the manual valve from moving into reverse position to prevent accidental reverse engagement above approximately 10 to 15-mph. When the reverse button is depressed above this speed the manual valve is stopped at neutral and the transmission remains in neutral until another button is depressed. The reverse blocker valve is activated by governor pressure.

The 1-2 shift valve determines whether the transmission is either in low gear ratio or second gear ratio, depending on whether the valve is in the up-shifted or down-shifted

position. The 1-2 shift valve train consists of a shift valve, valve spring and a governor plug.

The factors controlling the upshift and downshift of the 1-2 shift valve are determined by vehicle speed, governor and throttle pressure.

The 1-2 shift valve is moved to upshift position by governor pressure acting on the governor plug, when the governor pressure is high enough to overcome shift valve

spring tension and throttle pressure. The 1-2 shift valve is moved to downshift position by shift valve spring tension alone at normal closed throttle stops or by spring and kickdown pressure which overcomes governor pressure during a forced downshift.

The 2-3 shift valve automatically shifts the transmission from second to direct or from direct to second, depending on the vehicle operation. This shift valve train is similar in construction and operation to the 1-2 shift valve train, in that it is controlled by governor and throttle pressures and spring force.

The kickdown valve makes possible a forced downshift from direct to second, second to breakaway and direct to breakaway by depressing the accelerator pedal past the detent "feel" near wide-open throttle.

It is desirable to limit the maximum vehicle speed at which kickdown may be made (approximately 60mph from drive to second and approximately 30mph from drive to second to breakaway). The throttle pressure actuated kickdown detent plug on the stem of the kickdown valve supplies the resistance necessary for a detent "feel" at kickdown.

Kickdown pressure when applied to the spring end of the shift valves is great enough to make the shift valves downshift against the force of any governor pressure up to the kickdown limit speeds.

The shuttle valve has two separate functions and performs each independently of the other. The first is that of providing fast release of the kickdown band and delayed smooth front clutch engagement when the driver makes a "lift-foot" upshift from second to direct.

The "lift-foot" upshift is made by accelerating the vehicle in breakaway or second gear and then returning the accelerator pedal to closed throttle. Without the shuttle valve, the resulting upshift to direct would consist of a series of lurches, caused first by the braking effect on the vehicle by the second gear ratio and then by the harsh engage-
(Continued on page 60)

Shift Pattern Summary Chart

Condition		Axle Ratio	
		3.23-1	3.55-1
Closed throttle	1-2 upshift	6-11	6-10
Closed throttle	2-3 upshift	10-14	9-13
Wide-open throttle	1-2 upshift	25-41	23-36
Wide-open throttle	2-3 upshift	58-69	52-63
3-2 kickdown limit		46-62	42-56
3-1 kickdown limit		24-35	22-32
Closed-throttle downshift		4-10	4-9

Dough Is in Our Suds

By **RALPH B. COBB**

Owner, Cobb's Gulf
Washington, D.C.

CAR washing might not be profitable, as some of the dealers say, but when you sell other services to the traffic that car washes bring in, the picture changes.

A \$1.50 car wash brings us an average \$5 to \$8 sale in other services in five cars out of ten from customers who came in for nothing more originally than a soap-and-water bath for their cars.

There is one important premise, however:

You have to do a first-class job in washing to build a growing traffic and successful volume in extra ties that come through repeat business.

We do all car washing in the basement, 530 on an average a month, some 6,500 approximately a year. Two full-timers wash cars the year 'round in the basement bay equipped with an overhead spray on tracks that is moved back and forth manually. In a second bay cars are



Extras like a good wax job make the car-cleaning department profitable.

dried by hand. In an adjoining bay we wax cars, 20 jobs a month that result entirely from car washes. There are spaces in the basement for storing 55 cars that are usually picked up the same day.

Located in an area of office buildings occupied largely by professionals, our operation would find car washes in themselves with all-day storage unprofitable were it not for the other services we sell to customers.

Our approach is usually to ask our customer who wants nothing more than a wash job how his car has been behaving. If he is one of our regular customers, we glance over his service record and find he

may need an oil change, a lubrication, front wheel bearing repack, a brake reline, a tune-up.

If he reports on his own that he has hard starting, loss of power on a hill, engine choking behind a light, we look into the trouble at once. We note condition of his tires, his battery, his mileage record, the sticker in the door of his car. We talk up the protection a wax job does on his car. Tire switching may be in order.

Our good work has built us a reputation for excellent car washing that brings many new faces to the station. Recently one of the government departments, Treasury, had us wash and wax 15 of its cars. While
(Continued on page 76)

Some 530 car washes are handled monthly, many of them being "repeats."





This wasn't posed. It's what the photographer found when he arrived to do his stuff.

Customer-Crowding Service Station

By DONALD J. SORENSEN

A MOTORIST driving past a three-pump DX service station on the bustling 18th Street Expressway in Kansas City, Kan., may often see it resembling a parking lot with cars so thick there seems little room to give gasoline and oil service.

This is no novelty at the Thorpe-Baldschun station. Customers with mechanical needs frequently find the operators so busy they can only say, "We'll try to work you in today." Invariably they do, but if it is a big job, an appointment is made and the customers are glad to wait, because Charles Thorpe and his partner, Henry "Hank" Baldschun, have built up a booming trade on the old-fashioned fundamentals of business—honest and fair prices, reliable work and the premise that the customer is always right.

"The customer comes first with us," said Thorpe in explaining the continued popularity of the station. "My father was a mechanic and he taught me to be honest in all of our dealings with customers. That is the key to our operations—complete honesty with the customer."

This may sound like an old cliché, but Thorpe shows how far he goes to keep his principles honest by disclosing an experience with a supplier of water pumps.

"Water pumps present an unusual problem to most motorists," he explained. "Frequently a pump can be repacked and thus save the customer some money, which we feel is one of our objectives. One way to keep a customer happy is to save him money

on a repair job.

"But this apparently seemed a bit old-fashioned to our supplier and he kept urging us to sell brand new pumps. We finally got tired of his kind of ethics and discontinued buying from him. We were doing several hundred dollars worth of business a month with him, but we felt it wouldn't be right for our customers if we didn't give them the honest type of service they deserve."

This is the kind of service that has seen Thorpe and Baldschun retain a

"Hank" Baldschun (left) and Charles Thorpe relax after working on a customer's Cadillac. Compact arrangement of tools and equipment permits this relatively small shop to be used efficiently.



large following despite moving three times in recent years, all in widely-scattered parts of town. Their present site has survived competition from a more modern and larger station across the street. Even with the new station, Thorpe and Baldschun notice their business has increased and the demand for their mechanical skill is as great as ever.

Their station is at 51 South 18th Street, where they have been for about three years since they acquired it from Charles' father, John Thorpe. The street had just been widened to four lanes in preparation to convert it into part of a toll expressway.

The expressway now connects with the Kansas Turnpike and provides a shortcut for suburban Johnson County drivers coming into Kansas City, Kan.

The partners quickly established a going business with a nucleus in the devoted following which followed them from their previous location across town. The place was soon humming. The station would close for business at 9 p.m., but the lights were kept burning an hour or two later as Thorpe and Baldschun tried to get a car out for the next day. Word of their ability and conscientiousness spread and they were attracting more and more business.

This activity all took place despite the shinier station which had been erected across the street before Thorpe and Baldschun moved in. On a bigger lot and with more pumps

(Continued on page 83)

Too Many Dealers Can't Figure

I HAVE been asked by SOUTHERN AUTOMOTIVE JOURNAL for some suggestions as to what the franchised dealer can do to improve his financial position in these days of the hard sell and low profit.

That is a large order, but I shall attempt to fill it, with the qualifications that I speak only for myself, and that I could not expect universal agreement with my observations. Also, I am not talking about any individual or business.

All of us got into the automobile business to do two things: (1) to sell automobiles and (2) to make a profit. Some of us are doing both. A few are doing neither. Many are only doing the first thing. I address myself mainly to this last group, some of whom, perhaps, are selling too many cars—without a profit.

Just the other day a dealer came into my office for advice. "My financial statement shows I made \$12,000 last year," he said, "and I know I have an honest bookkeeper. But I don't have the money. Can you tell me what happened?"

"Yes," I told him. "You either don't know how to read your financial statement, or you don't know your accounting system. You'd better learn to find out what's wrong."

There are too many dealers in that category. They need to take a course in business management, or get someone who knows it.

I have suggested that to a couple of friends, but the answer I got was, "Hell, you know I'm no bookkeeper, but I can sell automobiles."

My company's administrative and accounting system costs \$50,000 a year, but I know of a number of dealers who are trying to do business out of their hats.

They complain that their lack of profits is due to too many dealerships, too many cars, too many models, or the first thing that comes to

By I. C. PENDARVIS
Vice President-General Manager
Fort Sumter Chevrolet Co.
Charleston, S. C.



The author has been a franchised dealer for a generation and a half, for Dodge-Plymouth and Chevrolet, having operated in Charleston, Jacksonville and Tampa, Fla., Mobile, Ala., and now back in Charleston. He is well known to dealers over the Southeast.

mind. They blame the factory, the bank, the salesman, the public, but never the right person—themselves.

Dealers like these usually can't tell you what it costs them to sell a new car, or a used car, or anything else. They have completely lost control of their business. They mistake a high volume of new-car sales for net profits. Nothing could be further from the truth. In this case, a dealer must know his cost as well as his sales price if he is to stay in business.

As a hypothetical proposition, if I were asked to give up a department of my business for six months—no longer, I would give up new cars, because our business is doing a much better job in every other de-

partment. Naturally our entire business is based on new-car sales, but we make money on trucks, new and used, on used cars, and make a profit on our parts and service. We make a profit on our finance reserve and insurance after repossessions of units.

In fact, some wouldn't believe it, but the lowest profit we have percentage-wise is on new cars. As soon as dealers learn they cannot make their big profit from new-car sales alone, they will be getting close to financial improvement.

The key to the problem is cost control. Until a dealer knows and practices cost control, he is fighting in the dark. His business is a ship without a rudder until he knows how much it costs to sell a new car, how much it costs to sell a new truck, how much it costs to sell a used car or a used truck, how much it costs to run service and parts departments per new car, how much finance income he has and how much insurance income.

Once he has learned all this, however, he is ready to act intelligently and effectively. He can pinpoint his trouble and correct it.

This automobile business has changed, is changing rapidly and will continue to change. The only thing constant about it is that for the last ten years there has been one car to every three persons of our population. The figure has not varied one per cent from that trend from year to year. I believe we can assume that the trend will continue. Somebody will sell that many cars, but whether they do it at a profit remains with the individual. Whoever does it at a profit will have to change with the business.

For the present, to dealers seeking to improve their financial position, I would suggest that after attaining cost control, or, at least, a knowledge of it, that they figure the amount of assured business they can honestly and rightfully expect during the next 30 days or other forecast period, and set their expenses to that goal. If the volume is greater than expected, his profits are higher. If his volume is not as high as his expectations, his loss will be less than it would have been under a higher expense.

My experience with most dealers,
(Continued on page 64)

"My company sold more than 3,500 new and used cars last year, and we had control figures every business day. It cost us in total company expense \$294 to sell every new car that we sold last year. It is easy for me to understand that if we sold a car for less than \$294 over invoice, we lost money. What I can't understand is how dealers selling for \$50 to \$100 over invoice can make a profit. I don't believe they can."



Over-all view discloses diagonal impact at right rear which drove car ahead for second impact at right front. Right door overlaps lock post.



The view of this same car from left rear shows crumpling of rear deck and rear fender which was driven into the trunk's opening.

Multiple-Pull Method for Collision Jobs

MORE economical methods of attacking the major collision repair job are occupying the attention of the service industry as a means to avoid "pricing themselves out of the market." High costs of repairs are reflected in skyrocketing insurance premiums and the "totaling out" of wrecks which would otherwise provide grist for the body shop mill.

The unitized body was influential in advancing the cause of "outside pull" methods of realignment and as

this concept is receiving popular acceptance, constant variations for improving the system are suggested by both operators and manufacturers. The development of the system is not dependent on the unitized body, for the operations are practically identical when used on conventional body and frame corrections.

Servicemen who have been using the outside pull method on various types of collision jobs have offered as criticism of the method for pulling the more complex type of damage,

a need for more sources of directional pull. They complain that on complex damage, it is time-consuming to detach clamps from a sheet metal pull in one direction to then reattach the chain and clamps to a body support member or the frame for a pull to another angle or another direction, and then possibly make a hookup change to other parts before returning to the original pull.

In addition to the time wasted in these hookup changes, in many cases either a simultaneous "hold" or an additional "pull" on one or more different sections aids in aligning the original part. This means setting up rams for an inside push for the "assist," when attaining the proper angle by this means may be difficult to achieve, and therefore they maintain that an outside pull would be more efficient.

Recently, in a body clinic conducted for Albuquerque (N.M.) Independent Garage Owners in the Has-

Right rear view shows the damage to the bumper, frame, fender and fuel tank.



Both front frame horns are anchored to frame machine with clamps, knees and chains.



kew Bee Line Safety Service shop, engineers demonstrated a new multiple, directional pull system of body and frame alignment they have been testing in several large midwestern body shops.

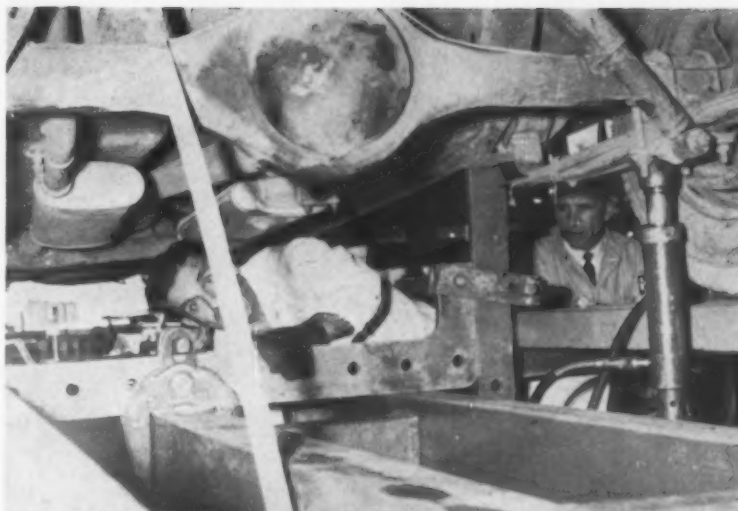
This system provides facilities for simultaneously pulling and holding, and applying and releasing pressure as required, by means of four pull yokes with 10" stroke rams, and a four-way console pump. Chains, plus a selection of clamps for gripping frame and body members, sheet metal parts and pinch welds, serve to connect the ram power to the job. The vehicle is anchored rigidly to a frame machine for the operation.

A versatile selection of knees, cross beams, extensions and yokes make it possible to obtain the desired directional pull at any height around or under the vehicle. The required components are assembled and attached to the frame machine beams so the pull yokes can be positioned for the desired pull angle for each body and frame component to accomplish the alignment problem.

As the straightening proceeds to a point so that one or more yokes must be moved to change their angle of pull, then one or more rams can be left in the hold position, the pressure is removed from the rams in the yokes to be moved, and these yoke pivot pins are removed and the yoke is positioned at some other location along the cross beam and the pivot pin is replaced. Pull from the new location can now be applied to facilitate the straightening.

The Chrysler hardtop used for the

Power and control are supplied to rams with four-way console-type electric-hydraulic pump.



Top: Side brace is positioned ahead of rear spring hanger on frame machine. Vehicle is thus held in alignment against side pulls.

Above: Preliminary pull with ram and yoke anchored to right upright beam draws bumper out of crushed metal so bumper can be removed.

demonstration had been struck in the right rear bumper and fender area at an angle that directed the line of force diagonally toward the left front of the car. The obvious damage to be corrected during the demonstration included the right rear portion of the bumper driven into the fender and rear deck. The right rear fender was driven inward and forward with a buckle under the right rear quarter window and the right door opening was reduced by the forward bend of the lock post. The rear deck floor pan was crushed inward from the right and the deck lid could not be closed.

The frame rear cross member was crushed and torn and the right frame side member crumpled in two places in the rear axle pickup area. This latter member was also driven

forward enough to cause a slight "diamond" condition.

The general scheme of attack on these problems would include a firm anchor at both corners at the front of the frame to the frame machine. A side holder would be situated slightly to the rear of center of the vehicle to hold it in alignment on the rack.

Since the rear bumper was crushed into the rear deck and fender sheet metal, the first pull would be for the purpose of pulling it out sufficiently to get to the attaching bolts so the bumper could be removed.

One pull chain cleared this obstruction quickly, and the attaching clamps were made on the frame rear cross member, the rear deck and the rear fender. A pull chain was connected to each of these points and pressure was applied to the chains



Top: Rams and yokes mounted on cross beam and upright beam provide the various levels and angles for planned pulls.

Above: Pulls on right frame member and trunk start preliminary movement to rear and right of frame and body.

to start the pull necessary to get the rear cross member and rear horn of the side member started back into alignment.

Assistance for the preliminary pulls required hammering and bumping to properly start the unkinking of the metal.

In all repair jobs of this nature a constant working of the sheet metal is required so the panels will all return to the original shape as the heavy supporting members are brought back to alignment. Kinked metal panels can cause a great deal of stiffening resistance to alignment of the support members, so it is important that this stress be relieved by working the sheet metal along with the straightening pulls with the chains.

Even if the panel is to be replaced, it must be roughed out and shaped during the straightening operations so that final alignment in all locations will be properly sized.

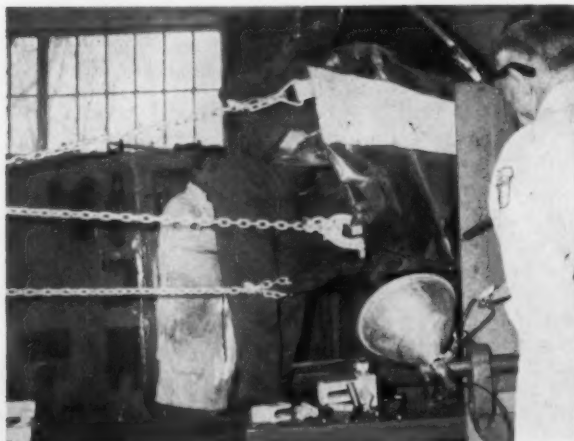
As the dimension of the frame changes during pulling, then different hookups and different angle of pull are required on the sheet metal parts. Clamps are then added or moved, and the yokes are moved around on the crossbars to provide the desired directional pull. The pressure on the rams that are to be moved is released while pressure is maintained on the rams attached to the frame or member that is under straightening stress, so it will not spring back.

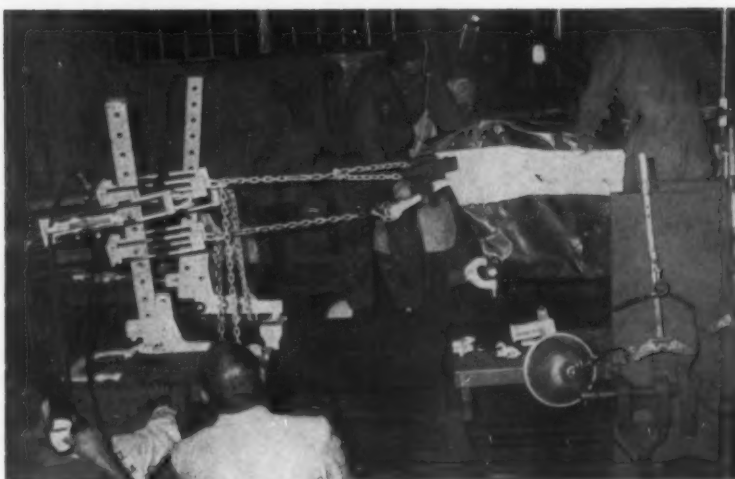
Badly bent, torn or crushed portions of the frame required heating to preclude further damage and to facilitate pulling it back to the former contour.

Hammering along the crown of the rear fender helped unlock the kinks

Initial straightening pulls at appropriate angles start upper and lower fender metal and right frame member.

Heat is applied to frame member with torch while pull is maintained with ram and yoke. Smaller tip is used to heat sheet metal where required.





Angle pull on trunk and upper fender tends to draw sheet metal to rear and side for original alignment contour.

and bends as it was pulled backward and downward from one or two positions. The heavy floor pan in the rear deck had broken loose from the right body panel and a special ram was clamped to it from under the car by a ram anchored to the frame machine. As cross pressure was exerted on the floor pan, the kinks were unlocked by hammering and it moved back to its original shape. A rearward pull was also applied to the deck during this shaping operation.

It is apparent during the unlocking operations of the bends in the sheet metal panels that as much or more power is exerted in pulling them into shape as in pulling the frame after their kinks are unlocked. Therefore, strong clamps must be firmly attached to sheet metal parts and considerable power must be available while working them, which makes the availability of two or more pull yokes for one panel a positive time saver.

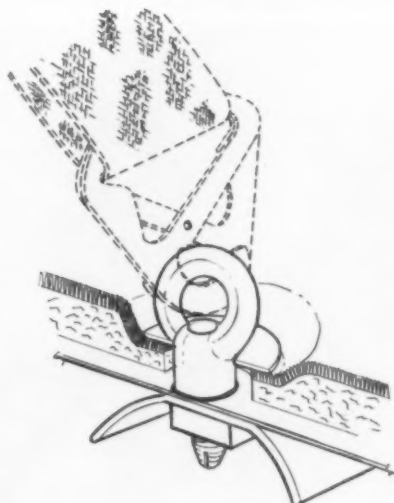
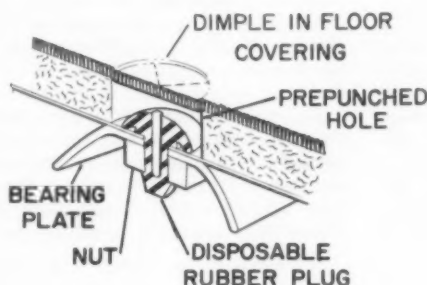
Protecting the Regulator On Plymouths, De Sotos

DIRT- and salt-laden water running down the engine compartment side of fender side shield on some 1961 Plymouth and De Soto cars can cause a build-up of corrosion on the underside of the alternator voltage regulator which will bridge between regulator base and the resistor terminals and, when wet, will cause erratic operation or premature failure of the regulator.

A bulletin issued by Plymouth Division advises that diversion of water from voltage regulator may be accomplished by fabricating a

shield 2 x 6" from No. 25 gauge (approximately .020 to .030" thick) sheet metal. Be certain to finish the edges of the shield exposed by the formation of the 60° angle with emery cloth.

Press body sealer into the "V"



formed by the shield, into the sheet metal joint between the fender and side shield above the regulator and into the unused mounting holes underneath and adjacent to the regulator. This will help prevent road splash from entering the engine compartment at these points.

A non-corrosive plastic type of coating will soon be used in production to cover the resistors on 1961 Plymouth cars.

Tarheel Towns Adopt IGOA Deposit Plan

A NUMBER of North Carolina cities, including Raleigh, Greensboro and Salisbury, have adopted the estimate deposit plan as sponsored by the Independent Garage Owners of America, according to Bryan G. Davis of Raleigh, former president of IGO of North Carolina.

Plans are being made in other cities in the state to make the issue statewide, Davis said. "Considerable study and planning are continuing in the matter of the ten per cent discount, and we believe we will be successful in getting rid of that evil in the not-too-distant future."

All 1962 Dodge cars will have four built-in anchorages, included as standard equipment, for installing seat belts without having to drill or special tools. Each anchorage is sealed with a rubber plug against water, dust and noise. The under-carpet jute is prepunched and the carpet is dimpled. Installation, requiring only minutes, consists of locating carpet dimple, making a one-inch "X" with knife in carpeting, removing rubber plug with pliers and then installing anchors and hook on seat belts. Final installation appears at left.



The colorful sign attracts attention of thousands passing daily on the nearby traffic artery.

Garage with All Trimmings

By **BARON CREAGER**
Southwestern Editor

IN THIS independent garage operation there are courtesy cars, pick-up and delivery service by motorcycle, a time-payment plan and an outside salesman who calls on fleet prospects and produces business.

Since the firm of Trowell and Turner Automotive moved into a new and larger place of business in Dallas, Texas, in September 1960, shop volume has increased 50% as planned.

There are three partners. M. W. "Jiggs" Trowell handles the front office, much of the bookkeeping and

does no shop work. Brother A. D. Trowell serves as shop superintendent and Charlie Turner is responsible for parts and also helps out in front.

Before they built the new place the three partners sat down and agreed on the amount of income each needed from the business. Next they figured out how much volume would be required to produce that

income above expenses. Then they simply planned the building to accommodate the required volume, with room to spare for expansion.

"Even with business as slow as it has been for the past six months our shop volume has increased 50%," "Jiggs" Trowell said.

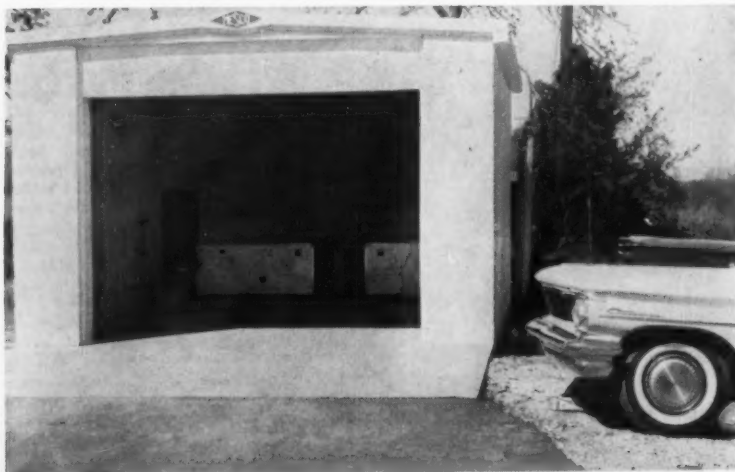
"Of course, we've been in business for ten years and have a good backlog of return customers, but that doesn't explain the increase. We have a more systematic operation here. Mechanics have a better place to work and better facilities.

"However, we believe the principal factor in our increased volume is our theory—put into practice—that each mechanic must have two stalls. That way, if one job is down waiting for parts, a mechanic can move over into the adjoining stall to another job. It isn't good to have a man sitting inside and a car that needs repairs sitting outside."

In the previous shop there were eight stalls and there were generally four mechanics on the line. Presently there are 17 stalls and six mechanics, although the 17th stall, housing the front-end machine, is in a separate building. This provides 16 stalls in the shop proper and the ideal operation would be with eight mechanics. Of the six mechanics presently on the line, three double as air-conditioning specialists when necessary and two other line mechanics double as transmission specialists.

"Jiggs" Trowell says the courtesy-

To save shop space and avoid pit to walk around, the front-end machine is situated outside the shop in a separate building.



This Texas shop can boast of volume being up 50% since moving into a new building — built largely by the garagemen, who believe in two stalls per mechanic (for more profit), furnishing pick-up and delivery service by motorcycle, a time-payment plan and an outside salesman to produce extra business.

car service pays big dividends.

"We don't know of any independent any place who has courtesy cars," he continued, "but we find it gets us business and holds business. But in our two courtesy cars we have an original investment of only about \$250.

"One of our courtesy cars was in a wreck before we acquired it and one side of the body was badly damaged. The insurance company paid off the owner and we bought the car for \$100 and fixed it up. A traveling salesman recently used that car to go to Mississippi and back. His car flat quit on him the day before he was due in Mississippi and we didn't mind letting him have our car for the trip. We had a \$400 new engine job on his car.

"All the new-car dealers in this



Left: "Jiggs" Trowell, with portfolio of photos of the various phases of the garage, prepares to call on prospective customers. Right: Last year the shop sold and installed 40 air conditioners, expects to sell more this year.

area have courtesy cars, but they have all abandoned the pick-up and delivery service with three-wheeled motorcycles. We are continuing that service. We find it pays because it is a great convenience and time-saver for customers. Pick-up and delivery are involved in dealing with 25% of our customers."

Some weeks "Jiggs" is away from the business for one to three days making calls on prospective fleet and industrial accounts, but he seldom makes a "cold" canvass. Leads on potential fleet accounts are obtained from customers and other conversa-

tional sources.

This practice was launched in October 1960, but before starting out, "Jiggs" armed himself with a neat, leather-covered portfolio of photographs—some in color—showing all departments of the business and special equipment available in the tool bay. In fact, he bought two such portfolios at a total cost of \$150, thinks the price was high, but worth it from the over-all viewpoint.

In and around the front office and the shop he wears the standard white uniform with "Jiggs" embroidered on a pocket and, of course, dresses differently for his outside calls. But, since his "job" is not of the "white-collar" type, he does not dress out of character for outside calls. He wears slacks and a sport shirt, but no white collar.

"For the first couple of months," he reported, "I was thinking I was wasting my time making those calls. Nothing happened. Then we began to get business from the people I had called on. I am still making those calls as regularly as necessary, and if the business comes in we can take care of it by adding two more men, since we have the stalls available.

"In soliciting fleet business, I continually run into requests for parts discounts which, for obvious reasons, I must reject.

"We have one fleet customer who left us for a while because of this discount matter. We had the business, then he called me in and said he had to have that discount on parts, that he could get it from a dealer. I

(Continued on page 79)

This case full of trophies was won in dirt-track racing at Dallas and Fort Worth by the Trowell brothers. A. D. (left) retired from racing four years ago and "Jiggs" quit six years ago. The third partner, Charlie Turner, was away on vacation when this photograph was made.



Bearings: Our Road to Safety

By **CARLOS E. ZAMORA**

Owner, Carlos Auto Service
Kensington, Md.

WE APPROACH safety through front wheel bearing repacks.

It is up to us to see that our customers are operating safe cars. We cannot expect them to know when parts are worn and cars unsafe. And one way of checking the entire front-end is to ask the customer when front wheel bearings were last repacked.

Often overlooked, front wheel bearing repacks are checked for wear. Washing them in kerosene, checking them and showing wear to the customer, we sell practically ten out of ten jobs recommended. We always explain the hazards of a worn wheel bearing that may cause a wheel to lock up.

This \$2.50 job for a repack gives us an opportunity to do a 20-minute checkup. We check for worn kingpins, upper and lower bushings, tie-

Carlos E. Zamora shows a customer faulty steering mechanism. Safety concern is uppermost at this shop in suburban Washington, D.C.



After being cleaned, bearings are shown to customer to point out wear. Other hard parts also probably are worn, this safety-minded garageman will remind.

rod ends and for rough spots in steering. With the wheel off we get a chance to look at brake linings and hoses. A note is made at the side of the repair order as to what condition we have found.

We find 60% of our brake work through this safety inspection. Approximately 15% of our annual general automotive repair gross of \$45,000 comes from front-end and steering checks. A real concern with safety and taking this initial step lead to sales through showing the customer what is wrong, how it can be corrected and what can happen if he fails to take care of this repair or replacement.

A few examples will illustrate:

A customer brought his Buick in for front-end alignment. We inquired about front wheel bearing repack and went ahead with a front-end inspection upon his agreement to let us take care of the repack. We found the brake lining worn thin, also worn kingpins and bushings.

Explaining to the customer it was useless to align front-end if there were worn parts because other parts would be worn unevenly, we sold him a complete brake reline, replacing worn kingpins and bushings, and the front-end alignment.

The \$86 sale put a safe car back onto the road, and the customer fully understood in terms of safety and economy what he was paying for.

In another case, a '56 Chevrolet station wagon, we observed a grinding noise when the customer came in for a brake adjustment. Again inquiring about the last time the front wheel bearings were repacked, we got our opportunity to look. This time front wheel bearings were so badly worn they had to be replaced. This amounted to \$35.

An important practice often overlooked by garages is advising customers to come back for a checkup. It gives a customer a feeling that you are honest and conscientious about your work, that you take responsibility for your repairs and have a genuine anxiety about his safety.

Any repair we do on a car is inspected and checked in a week, two weeks, three weeks or whenever the customer feels uneasy and wants us to have a look. On front-end and steering we invite him to come back for free checkups in three weeks.

A brake reline is advised to come back in two weeks and we'll adjust the brakes and bleed them without charge. We tell them emphatically

(Continued on page 64)



Garageman Taylor believes in repairing, otherwise replacing.



To build confidence, he talks over jobs with customers.

Garage Success by Three Steps

By WENDELL GIVENS

J. M. TAYLOR of Birmingham attributes the success of his independent garage to a three-point program he instituted when he went into business for himself:

1.—Specializing and staying abreast, or even ahead, of technical changes.

2.—Inspiring confidence in customers, never growing too large or being too busy to deal with them individually.

3.—Selling and installing only top-quality parts.

Taylor has adhered closely to his program and the results are evident to both the long-standing customer and the casual visitor to Taylor Auto Electric Service Co. on the Alabama city's southside.

Last December the company moved into an impressive new plant that provides double the working space of previous quarters, drive-through facilities and a comfortable office and waiting room.

The plant figures to add steadily to the garage's business volume. "But quite frankly we don't want to grow too fast or too much," Taylor said. "To a large degree we've built the business on close, friendly and satisfying association with our customers, and we plan to continue that way."

The customer satisfaction un-

doubtedly stems in large measure from Taylor's extensive training in and knowledge of ignition and carburetion.

He holds a postgraduate degree in carburetion, has attended more short term schools on ignition than he can remember and is a former field representative for an automotive parts manufacturer. As a factory school graduate he receives information on technical changes soon after the engineers have planned them and often before they appear in new-model cars.

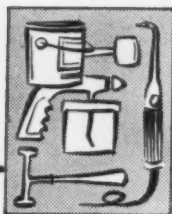
"Thus," he said, "we can more or less anticipate many mechanical troubles before our customers bring them in—and not just in ignition systems. Recently we developed our own method of correcting a fault in the brake system of a new model. Rather than having to search for the trouble, we knew precisely what it was and gave our customers a rapid, economical repair job."

Taylor Auto Electric stocks only recognized, top-quality parts.

"You'll lose in the long run buying the so-called cheaper materials," he asserted. "They'll come back on you, especially if you depend on a

(Continued on page 90)





BODY SHOP OPERATIONS

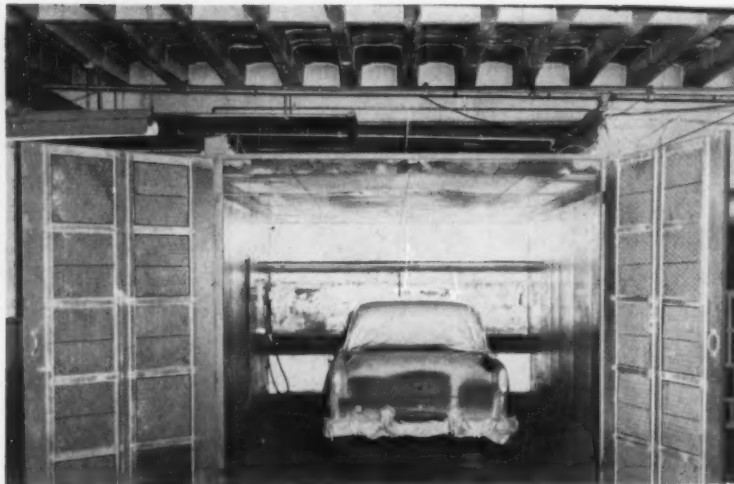


Fig. 1—This is an air washer spray booth. Car inside is to be two-toned. Roof panel has been sprayed, the wash system has been turned off and the vehicle is ready to be removed for drying. Note the filters. They must be clean always.

Getting the Most Out of the Paint Shop

By E. M. LOWERY
Technical Editor

THE paint shop is continually accounting for a larger share of the shop's gross. To get the most out of it, we must have certain equipment and the men must know how to use it.

We must also know how to prepare a job for painting, such as cleaning, sanding and masking.

In order to turn out a clean paint job, whether it be a spot or an all-over, there must be a clean place in which to apply the finish. This normally calls for an air washer spray booth (Fig. 1). A great many

paint shops have such equipment but do not get the most out of it because of improper maintenance.

We may ask, "Why are care and cleaning of the spray booth important?"

The answer is:

1.—To reduce fire hazards caused by accumulated overspray.

2.—To maintain the efficiency of the booth.

3.—To prevent freshly painted units from becoming blemished.

Although the air washer type booth is preferable, some shops use

the dry type.

Following are some general rules and suggestions for the correct maintenance of either type.

The dry type:

1.—A spray booth coating should be applied to the interior booth walls, distributing plates, the fan and exhaust stack. When overspray accumulates on the coating, it can easily be removed.

2.—Since a considerable portion of the spray enters the exhaust stack and must be removed, it should be accessible.

3.—Cleaning the booth should be regularly scheduled so that fire hazards are reduced and full efficiency of the system maintained. Accumulated overspray results in fire hazards and increased resistance to air flow.

4.—In removing the coating, a non-ferrous, non-sparking scraper must be used to prevent the possible igniting of combustible material.

5.—The filters should be inspected for restriction of air flow and should be cleaned or replaced as necessary. Clogged filters prevent sufficient air flow to move overspray.

Care of the air washer type booth:

1.—Booth coating need be applied only to the dry surfaces of the booth enclosure. The water wash eliminates the necessity for coating the fan and stack, since overspray is removed from the air before it reaches these points.

2.—Water in the washing chamber tank must be changed and compounded regularly to maintain the efficiency of the booth.

The primary function of compounding is removal of the stickiness from overspray so that it will not adhere to the working portion of the washing chamber. To do this, a material called "water wash compound" is added to the water. The amount to be used and the amount to be added should be determined by following the recommendations of a reputable compound supplier. Water wash compounds also prevent rusting.

The residue that floats on the surface of the water should be re-

moved at the end of the working day; otherwise it is apt to sink to the bottom of the water chamber. Where high production occurs, skimming off this residue may be required even more often.

At regular intervals, depending on the usage of the system, drain the water tank completely and remove any sludge that has settled to the bottom. Then refill with water and add a fresh charge of compound.

3.—While the water chamber is opened for cleaning, test the pump in order to check the header and nozzles for clogging or fouling. If the nozzles are dirty, they should be removed and cleaned.

4.—Normally the fan and the exhaust stack will require little if any cleaning, unless compounding has been neglected, nozzles are clogged or periodic cleaning overlooked.

Note: Avoid coating spray booths, either air washer or dry type, with grease or paper. This presents another fire hazard.

In spray booth maintenance, always remember that it is most important that we have sufficient exhaust in the booth to keep the air clear of mist, whether it is an air washer or dry type. So keep the interior walls, the washer system and the filters clean.

The spray gun (Fig. 2):

By the correct use of the spray gun production can be increased, quality of finish improved, paint wastage cut to the minimum and fatigue reduced.

To achieve perfection in spray gun use it is essential to have the right gun for the job. There are small, medium and full-size guns for the various type of jobs. For small articles, such as garnish moldings, instrument panels, etc., a small gun will be easier to handle and more economical with paint. For large surfaces, a full-size gun will



Fig. 2—Using the spray gun. The man at this end of the air line must know the correct technique for handling the spray gun.

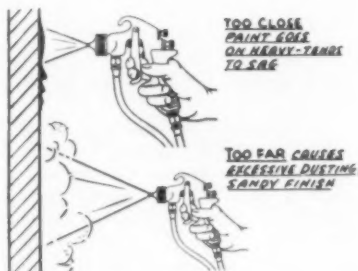


Fig. 3—Gun distance from the object being sprayed must be right.

give much faster application.

Either gun must be fitted with the correct-size fluid tip and air cap for the job.

The fluid tip size is governed by the type of material to be sprayed and the rate of flow required for the particular job.

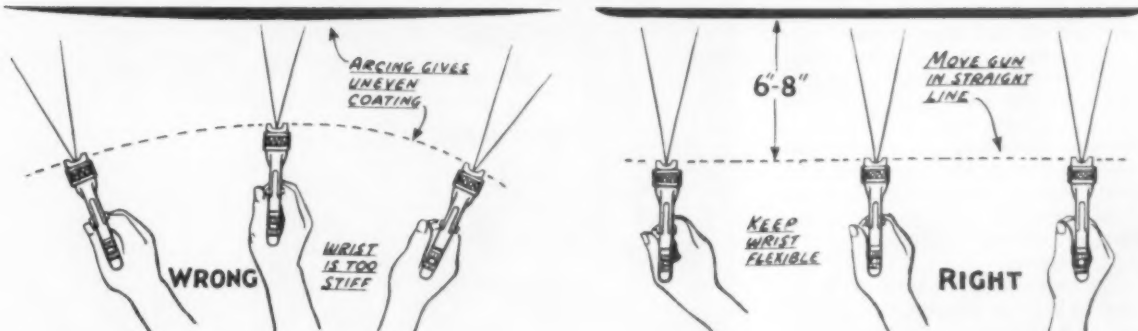
The air cap size is governed by various factors, such as compressed air supply, size of article to be painted, type of material being used, quality of finish and speed of finishing and method of fluid feed.

Spray gun adjustments:

In using any spray gun there are a number of adjustments of extreme importance. They should be studied carefully. Best results are dependent upon the proper flow of material from the nozzle, correct proportioning of atomizing air pressure with flow of material, and proper spray width.

Most spray guns are fitted with an adjusting screw which affords control of the flow of material from the nozzle, but in practically all cases it is recommended that this control be left wide open and the fluid flow adjusted at the pressure feed tank, when used.

Figs. 4 and 5—Gun movement in relation to object can determine the quality of the finished job.



A spreader control affords a means of changing the spray pattern from a round spray to various-width fan sprays as may be required. There is also an air adjusting valve which can be attached to the air inlet of guns to control atomizing air pressure.

In making adjustments of the spray gun, too high an atomization pressure is to be avoided, since it will spread or thin out the center of the spray pattern. Insufficient air pressure, on the other hand, will not atomize the material sufficiently and will produce a coarse, spattered effect. This adjustment can be checked by studying the spray pattern produced by the gun.

Since flow of material from the gun nozzle determines the speed at which the gun must be moved across the surface, the speed of operation sometimes can be increased greatly by using a setting which permits

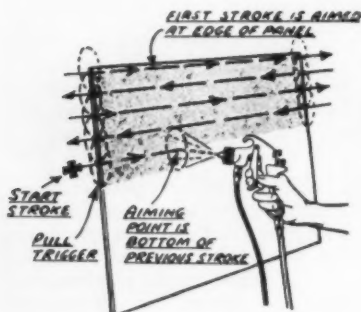


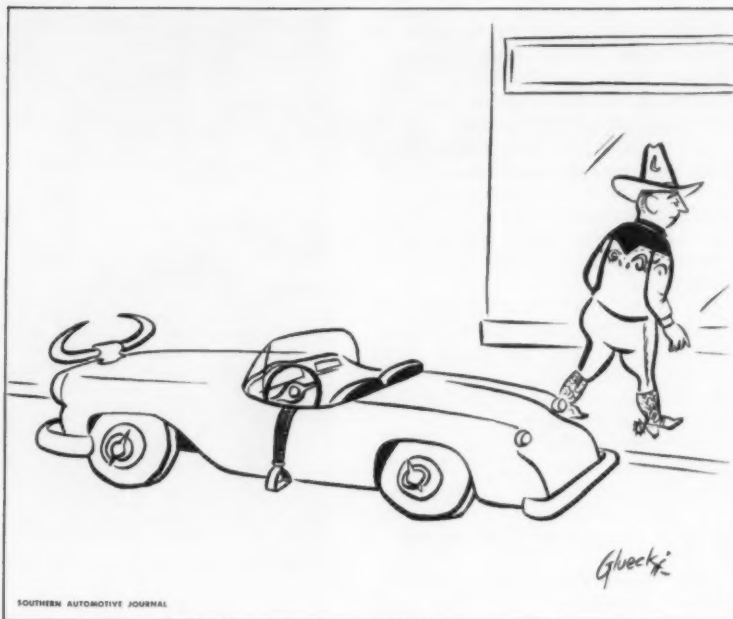
Fig. 6—When spraying a panel, use alternate right and left strokes, triggering the gun at the beginning and end of each stroke. The spray pattern should overlap one half the previous stroke for smooth coverage without streaks.

faster flow of material. Then, to prevent excessive deposit of paint, work out a sequence of motions which will give the minimum number of strokes to cover the surface efficiently without double-coating any part of it. A comfortable rapid stroke should result in sufficient coverage without runs or sags.

In working out a motion study on a particular product, an experimental period using various settings of adjustments will be found of value in determining the most efficient operation. Note, too, the different results obtained by changing fluid pressure, atomizing air pressure and spreader adjustments.

The stroke:

The spray gun stroke is made by moving the gun parallel to the work and at a right angle to the surface.



The distance from the gun to the work should be from six to eight inches.

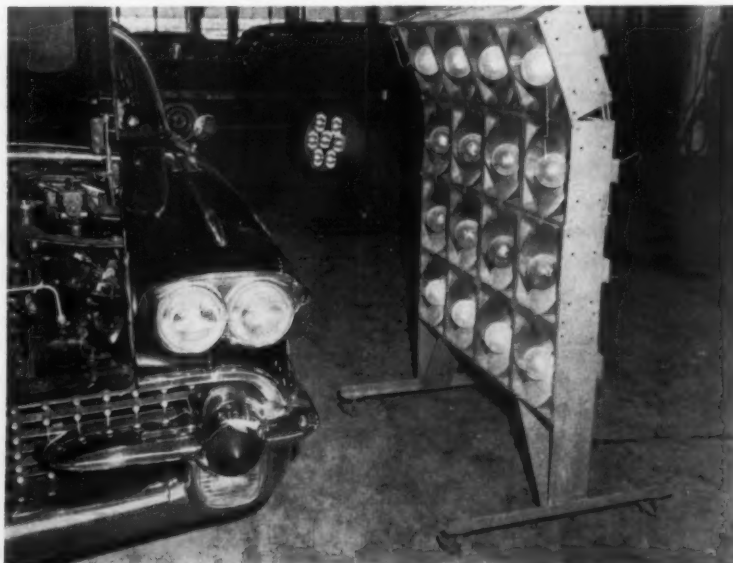
Work should be done with straight uniform strokes, moving backwards and forwards across the surface in such a way that the spray pattern overlaps the previous stroke by 50%. The closer the gun is held to the work, the more paint is deposited on the surface and the faster the gun must be moved to prevent sags, while holding the gun too far

from the work causes dry spray and excessive spray dust (Fig. 3). (Figs. 3 through 6 are courtesy of The DeVilbiss Co., Toledo, Ohio.)

This relation between the gun distance and the stroke speed is very quickly understood and the average sprayer will move the gun in or out as needed to permit a comfortable speed while depositing a full wet coating of material.

The obvious faults of arcing the stroke or tilting the gun as shown

Fig. 7—Forced drying, whether oven or infra-red lamps, saves time.





Figs. 8 and 9—Getting the job ready for the finish coat. The surface must be properly sanded, primed and masked

If first-quality results are to be expected. Performing these operations right usually eliminates most "do over" jobs.

in Figs. 4 and 5 should be noted. In certain types of work it is often necessary to tilt the gun, but this should not be done on surfaces suited to the correct gun position.

Holding the gun:

Another important factor is to hold the gun at all times perpendicular to the surface being sprayed.

"Triggering" (Fig. 6):

The trigger controls the action of the gun and the operator should learn to use the trigger during each stroke. The further the trigger is drawn back, the greater will be the flow of material. To avoid building up the material at the ends of the stroke, the correct procedure is to begin the stroke, then pull the trigger, releasing it again before the stroke is completed.

Infra-red baking panels (Fig. 7) speed up drying time. Normally enamel jobs can be baked in less than half an hour and lacquers and undercoats require only five or ten minutes.

Having the best of equipment and knowing how to use it will not produce a quality job without the proper preparation of the vehicle before painting. The way the job is sanded and masked may make the difference (Figs. 8 and 9).

Most of the jobs today are "spot"

repairs, so here is a recommended method:

The end result of spot repairing depends upon the skill and knowledge of the operator doing the repair. In most cases, a more satisfactory repair may be obtained by finishing the complete panel involved.

Before sanding the surfaces to be painted, use a good wax and grease remover to eliminate all traces of wax, polish and grease. Dry the panel with a clean cloth. If the car has been polished with a wax or polish containing silicone, remove the silicone base.

Featheredge any broken spots with sandpaper. Treat any rusty metal with a metal conditioner. Follow the supplier's instructions for removal of any remaining traces of conditioner.

Apply primer surfacer. Spot-spray bare and feathered edges with primer surfacer, reduced according to the supplier's recommendations. Permit each coat to become dull (after all thinner has dried off) before applying additional coats.

Before sanding, allow the final coat to dry for the length of time specified by the supplier. Sand the primer surfacer according to recommendations.

If any imperfections still show, smooth out with spot glazing putty. Allow the putty to dry for the length of time specified and sand the same as primer surfacer.

Sand the patches and the entire panel to remove scratches and overspray in the old finish. Wipe clean, using a cloth dampened with thinner.

Spray the area to be painted with one medium coat of a sealer, reduced according to the supplier's instructions. Allow to dry for the length of time specified and, if necessary, scuff lightly with fine sandpaper to remove nibs.

Wipe the area with a tack cloth and spray one mist and one wet finishing coat of paint according to the supplier's recommendations.

Remove the masking tape, etc., and allow the paint to dry according to the supplier's own recommendations.

Multi-Color Sidewalls Announced by Goodyear

BANDS of color on their white sidewall tires with upholstery and trim of an automobile in "harmonious contrast with the basic body color" have been announced by The Goodyear Tire & Rubber Co.

John J. Hartz, tire development manager, said the tires are being made available to the automotive industry in the Custom Super Cushion line and will also be offered to the tire replacement market on a premium basis as production schedules permit. Initially, they are being produced with bands of red or blue. The bands contain fade-proof, inorganic dye.

July: Tailgate Torsion Bars

How to adjust, replace and align the deck lid and tailgate torsion bars of several popular makes will flow from Technical Editor Lowery's pen in July.

1961 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	Std. Wheelbase	TREAD		No. Cylinders and Valve Arrangement	Bore and Stroke	ENGINE			Piston Displacement (Cu. In.)	Standard Compression Ratio	FLUID CAPACITIES				WHEEL ALIGNMENT		
		Front	Rear			Testable H. P.	Max. Rated H. P. at R. P. M.	Max. Torque at R. P. M.			Crankcase Cap. (Qu.)	Transmission (Au.) (Pn.)	Fuel Tank (Gals.)	Cooling System (No Hoses) (Qu.)	Caster (Degrees)	Camber (Degrees)	Toe-In (In.)
BUICK Special	112	56	56	V8	3.50x2.80	39.2	155@4600	220@2400	215	8.8-1	4	12	16	12	— $\frac{1}{2}$	0 to $\frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$
BUICK Le Sabre	123	62	61	V8	4.125x4.3	54.45	250@4400	384@2400	364	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$
BUICK Invieta	123	62	61	V8	4.1875x3.64	56.11	325@4400	445@2400	401	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$
BUICK Electra	126	62	61	V8	4.1875x3.64	56.11	325@4400	445@2400	401	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$
CADILLAC 62 Sedan, 62 Coupe, 62 Coupe de Ville, 62 Sedan de Ville, 60 Fleetwood, 62 Eldorado and Biarritz	129.5	61	61	V8	4x3.875	51.2	325@4800	430@3100	390	10.5-1	5	18	21	18 $\frac{1}{2}$	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	F	$\frac{1}{8}$ to $\frac{1}{4}$
CADILLAC Fleetwood 75	149.8	61	61	V8	4x3.875	51.2	325@4800	430@3100	390	10.5-1	5	18	21	18 $\frac{1}{2}$	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	F	$\frac{1}{8}$ to $\frac{1}{4}$
CHEVROLET 6	119	60.3	59.3	6	3.56x3.94	30.4	135@4000	217@2000	235.5	8.25-1	5	9	20	17	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$
CHEVROLET 8 (263 cu. in.)	119	60.3	59.3	V8	3.875x3	48	170@4200	275@2200	283	8.5-1	4	9	20	17 $\frac{1}{2}$	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$
CHEVROLET 8 (348 cu. in.)	119	60.3	59.3	V8	4.125x3.25	54.5	250@4400	355@2800	348	9.5-1	4	19	20	21	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$
CHEVROLET Corvair	108	54	54	6A	3.4375x2.6	28.4			145	8-1	4	6	14	3=1 $\frac{1}{2}$	$\frac{1}{2}$ to $\pm \frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET Corvette	102	57	59	V8	3.875x3	48	230@4800	300@3000	283	9.5-1	5	9	16.4	15 $\frac{1}{2}$	2=30'	0=30'	0
CHRYSLER Newport	122	61	59.7	V8	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	22	23	16	C	B	$\frac{1}{4}$
CHRYSLER Windsor	122	61	59.7	V8	4.25x3.38	57.8	305@4600	410@2400	383	10-1	5	22	23	16	C	B	$\frac{1}{4}$
CHRYSLER New Yorker	129	61.2	60	V8	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	22	23	16	C	B	$\frac{1}{4}$
CHRYSLER Imperial	129	61.8	62.2	V8	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	22	23	16	C	B	$\frac{1}{4}$
COMET (144.3 cu. in.)	114	55	54.5	6	3.5x2.5	29.4	85@4200	134@2000	144.3	8.7-1	3 $\frac{1}{2}$	15	14	8.7	1 $\frac{1}{2}$ to $\frac{1}{2}$	0 to $\frac{1}{2}$ to $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$
COMET (170 cu. in.)	114	55	54.5	6	3.5x2.94	29.4	101@4400	156@2400	170	8.7-1	3.5	15	14	8.7	1 $\frac{1}{2}$ to $\frac{1}{2}$	0 to $\frac{1}{2}$ to $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$
DE SOTO	122	61	59.7	V8	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	22	20	16	C	B	$\frac{1}{4}$
DODGE Lancer	106.5	56	55.5	6	3.4x3.125	27.7	101@4400	155@2400	170	8.2-1	4	15	13	11	C	B	$\frac{1}{4}$
DODGE Dart 6	118	61.5	60.1	6	3.4x4.125	27.7	145@4000	215@2800	225	8.2-1	4	15	20	13	C	B	$\frac{1}{4}$
DODGE Dart 8	118	61.5	60.2	V8	3.91x3.31	48.9	230@4400	340@2400	318	9-1	5	20	20	13	C	B	$\frac{1}{4}$
DODGE Polara	122	61.5	60.2	V8	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	22	20	16	C	B	$\frac{1}{4}$
FORD Fairlane 6	119	61	60	6	3.62x3.6	31.54	135@4000	200@2000	223	8.4-1	4	20	20	15	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$
FORD Fairlane 500 8 and Galaxie (292 cu. in.)	119	61	60	V8	3.75x3.3	45	175@4200	279@2200	292	8.8-1	5	20	20	19	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$
FORD Fairlane 500 8 and Galaxie (352 cu. in.)	119	61	60	V8	4x3.5	51.2	220@4400	336@2400	352	8.9-1	5	20	20	19.5	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$
FORD Fairlane 500 8 and Galaxie (390 cu. in.)	119	61	60	V8	4.05x3.78	52.49	300@4600	428@2800	390	9.6-1	5	20	20	19.5	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$
FORD Falcon (170 cu. in.)	109.5	55	54.5	6	3.5x2.94	29.4	101@4400	156@2400	170	8.7-1	4 $\frac{1}{2}$	12 $\frac{1}{2}$	14	8.7	$\pm \frac{1}{2}$	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{8}$ to 5/16
FORD Thunderbird	113	60	60	V8	4.05x3.78	52.49	300@4600	427@2800	390	9.6-1	5	20	20	19.5	— $\frac{1}{4}$ to —1 $\frac{1}{4}$	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$
FORD Falcon (144.3 cu. in.)	109.5	55	54.5	6	3.5x2.5	29.4	85@4200	138@2000	144.3	8.7-1	4 $\frac{1}{2}$	3 $\frac{1}{2}$	14	8.7	— $\frac{1}{4}$ to —1 $\frac{1}{4}$	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$
LINCOLN Continental	123	62.1	61	V8	4.3x4.7	59.17	300@4100	465@2000	430	10-1	5	23	21	22	0 to —90'	0 to 45'	.063 to .188
MERCURY Meteor 600	120	61	60	6	3.62x3.6	31.54	135@4000	200@2000	223	8.4-1	4	19	20	15	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$
MERCURY Meteor 800 and Monterey (292 cu. in.)	120	61	60	V8	3.75x3.3	45	175@4200	279@2200	292	8.8-1	5	20	20	19	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$
MERCURY Meteor 800 and Monterey (352 cu. in.)	120	61	60	V8	4x3.5	51.2	220@4400	336@2400	352	8.9-1	5	20	20	19.5	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$
MERCURY Meteor 800 and Monterey (390 cu. in.)	120	61	60	V8	4.05x3.78	52.5	300@4600	427@2800	390	9.6-1	5	20	20	19.5	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$
OLDSMOBILE F88	112	56	56	V8	3.5x2.8	39.2	155@4800	210@3200	215	8.75-1	4	12	16	11	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	0 to + $\frac{1}{2}$	$\frac{1}{8}$
OLDSMOBILE 88	123	61	61	V8	4.125x3.687	54	250@4200	405@2400	394	8.75-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{2}$	0 to $\frac{1}{4}$
OLDSMOBILE Super 88	123	61	61	V8	4.125x3.687	54	325@4600	435@2800	394	10-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{2}$	0 to $\frac{1}{4}$
OLDSMOBILE 98	126	61	61	V8	4.125x3.687	54	325@4600	435@2800	394	10-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{2}$	0 to $\frac{1}{4}$
PLYMOUTH 6 Savoy, Belvedere and Fury	118	60.9	59.6	6	3.4x4.125	27.7	145@4000	215@2800	225	8.2-1	4	15	20	13	C	B	$\frac{1}{4}$
PLYMOUTH 8 Savoy, Belvedere and Fury	118	60.9	59.6	V8	3.91x3.31	48.9	230@4400	340@2400	318	9-1	5	20	20	20	C	B	$\frac{1}{4}$
PLYMOUTH Super Fury 8	118	60.9	59.6	V8	3.91x3.31	48.9	260@4400	345@2800	318	9-1	5	19	20	20	C	B	$\frac{1}{4}$
PLYMOUTH Valiant	106.5	56	55.5	6	3.4x3.125	27.7	101@4400	155@2400	170	8.2-1	4	15	13	11	C	B	$\frac{1}{4}$
PONTIAC Catalina and Ventura	119	62.5	62.5	V8	4.06x3.75	52.8	215@3600	390@2000	389	8.6-1	4	12	25	18 $\frac{1}{2}$	—1 $\frac{1}{2}$ to $\frac{1}{2}$	+ $\frac{1}{4}$ to $\frac{1}{2}$	0 to $\frac{1}{4}$
PONTIAC Star Chief and Bonneville	123	62.5	62.5	V8	4.06x3.75	52.8	235@3600	402@2000	389	8.6-1	4	18	25	18 $\frac{1}{2}$	—1 $\frac{1}{2}$ to $\frac{1}{2}$	+ $\frac{1}{4}$ to $\frac{1}{2}$	0 to $\frac{1}{4}$
PONTIAC Tempest 4	112	56.8	56.8	4	4.6x3.75	26.4	100@3800	190@2000	194.5	8.6-1	4	4	15.5	11.6	—1.40' to $\pm \frac{1}{2}$	+0.8' to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$
PONTIAC Tempest 8	112	56.8	56.8	V8	3.5x2.8	39.2	155@4600	220@2400	215	8.8-1	4	4	15.5	11.6	—1.40' to $\pm \frac{1}{2}$	+0.8' to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$
RAMBLER American—De Luxe and Super	100	54.62	55	6L	3.125x4.25	23.44	90@3800	160@1600	195.6	8-1	4	20	20	11	D	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$
RAMBLER American Custom	100	54.62	55	6	3.125x4.25	23.44	125@4200	180@1600	195.6	8.7-1	4	20	20	10	D	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$
RAMBLER 8	108	57.75	58	6	3.125x4.25	23.44	127@4200	180@1600	195.6	8.7-1	4	20	20	9 $\frac{1}{2}$	E	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$
RAMBLER 8	108	58.75	59.12	V8	3.5x3.25	39.2	200@4900	245@2500	250	8.7-1	4	20	20	19	E	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$
RAMBLER Ambassador	117	57.75	59.12	V8	4x3.25	51.2	250@4700	340@2600	327	8.7-1	4	22	20	18	E	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$
STUDEBAKER Lark 8	108.5	57.37	56.56	6	3x4	21.6	112@4500	154@2000	169.6	8.5-1	5	18	18	11	$\pm \frac{1}{4}$ 0 Prf.	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$
STUDEBAKER Lark 8	108.5	57.37	56.56	V8	3.56x3.25	40.6	180@4500	260@2800	259.2	8.8-1	5	18	18	17	$\pm \frac{1}{4}$ 0 Prf.	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$
STUDEBAKER Hawk Coupe	120.5	57.37	56.56	V8	3.56x3.62	40.6	210@4500	300@2800	289	8.8-1	5	18	18	17	—1 $\frac{1}{2}$ to —3	0 to + $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$

ABBREVIATIONS

A—Horizontally opposed.
B—Left + $\frac{1}{2}$, right + $\frac{1}{4}$.
C—Power steering + $\frac{1}{4}$ to $\frac{1}{2}$.
Manual = $\frac{1}{2}$.

D—Manual steering + $\frac{1}{4}$ Prf.
Power steering +2 Prf.
E—Manual steering + $\frac{1}{4}$ Prf.
Power steering +1 Prf.

F—Left + $\frac{1}{4}$ to $\frac{1}{4}$, right + $\frac{1}{4}$ to — $\frac{1}{4}$.

I—Valve-in-head.
L—L-head.
Prf.—Preferred.

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buys automobiles on credit"**

says **GARY E. LEE**, Ford dealer,
Fort Walton Beach, Florida

"The name 'Commercial Credit' is known to anyone who buys automobiles on credit. When we close a sale and say that financing will be arranged with Commercial Credit, very little, if any, further explanation is necessary. If we had to spend a lot of time explaining about some other finance company, it could easily kill a sale. Along with this national reputation, the frequent visits of Commercial Credit's local manager have been of greatest benefit to us. We discuss matters freely, exchange views, and clear up any misunderstandings face to face."

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serves successful dealers

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1961 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	ELECTRICAL TUNE-UP							Bat.	FUEL SYSTEM		VALVES			
	Breaker Gap (.0)	Cam Angle (Degrees)	Contact Arm Spring Tension (Ozs.)	Ignition Timing (Degrees)	Timing Mark Location	Spark Plug Gap (.0)	Spark Advance (Max. Centrif. (Degrees))		Spark Advance Max. Vac. (Degrees)	Cap. & Ter. Grd.	Carb. Mfr.	Fuel Pressure (Lbs.)	Tappet Clearance Intake (.0)	Tappet Clearance Exhaust (.0)
BUICK Special	13-19	30±1	19-23	7.5@1050rpm	VD	30-35	17@2100	17.5@16°	40N	RP	4½-5¼	Au	Au	29bte
BUICK Le Sabre	13-19	30±1	19-23	12@400	VD	30-35	22@3800	17.5@18°	70N	RP-St	5-6¼	Au	Au	31bte
BUICK Invicta and Electra	13-19	30±1	19-23	12@400	VD	30-35	22@3800	17.5@18°	70N	RP-Ca	5-6¼	Au	Au	33bte
CADILLAC (All Models)	16	28-32	19-23	5@480	VD	35	9@2000	12@20°	70N	RP-Ca	5¼-6½	Au	Au	39bte
CHEVROLET 8	19	28-35	19-23	5bte	FW	33-38	10@1400	22@15.5°	53N	RP	3¼-4½	Aut	Aut	16bte
CHEVROLET V-8 (283 cu. in.)	19	26-33	19-23	4bte	VD	33-38	28@3750	15@15.5°	53N	RP-Ca	5¼-6½	Aut	Aut	18bte
CHEVROLET V-8 (348 cu. in.)	19	26-33	19-23	8bte	VD	33-38	24@4600	15@13.5°	61N	RP-Ca	5¼-6½	Aut	Aut	18½bte
CHEVROLET Corvair	19	32-34	19-23	4bte	CsP	35	32@3600a	23@15.2b	35N	RP	5¼-6½	Aut	Aut	43bte
CHEVROLET Corvette	19	26-33	19-23	4bte	VD	33-38	28@3700	15@15.5°	53N	Ca	5¼-6½	Aut	Aut	12½bte
CHRYSLER Newport	14-19	27-32	17-21.5	10bte	VD	35	24@4100	22@15°	60N	St	4-5	Au	Au	15bte
CHRYSLER Windsor	14-19	27-32	17-21.5	10bte	VD	35	24@4100	22@15°	60N	Ca	4-5	Au	Au	15bte
CHRYSLER New Yorker and Imperial	14-19	27-32	17-21.5	10bte	VD	35	21@4600	22@15°	70N	Ca	4-5	Au	Au	15bte
COMET (144.3 cu. in.)	24-26	35-38	17-20	C	CsP	32-36	F	28@5.35°	40N	Ho	4-5	16	16	15bte
COMET (170 cu. in.)	24-26	35-38	17-20	10@500	CsP	32-36	F	19.8@3°	40N	Ho	4-5	16	16	15bte
DE SOTO	14-19	27-32	17-21.5	10bte	CsP	35	24@4100	26@16°	60N	St	4-5	Au	Au	13bte
DODGE Lancer	17-23	40-45	17-21.5	2.5bte	CsP	35	27@3850	25@14.5°	50N	Ca	4-5	10	20	8bte
DODGE Dart 6	17-23	40-45	17-21.5	2.5bte	CsP	35	25@4400	20@10.12°	50N	Ca	4-5	10	20	8bte
DODGE Dart 8	14-19	27-32	17-21.5	5bte	CsP	35	25@4600a	30@17°	50N	St	4-5	10	18	17bte
DODGE Polara	14-19	27-32	17-21.5	10bte	CsP	35	24@4100	26@16°	60N	St	4-5	Au	Au	15bte
FORD Fairlane 8	24-28	35-38	17-20	10@500	VD	32-36	F	26@8.3°h	55N	Ho	4-5	19	19	23bte
FORD Fairlane 500 8 and Galaxie (292 cu. in.)	14-16	26-28½	17-20	10@500	VD	32-36	23@4000	25@19°h	55N	Ford	4½-5½	18	18	12bte
FORD Fairlane 500 8 and Galaxie (352 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	25@16°h	65N	Ford	4½-5½	Au	Au	22bte
FORD Fairlane 500 8 and Galaxie (390 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	15@17°h	65N	Ford	4½-5½	Au	Au	26bte
FORD Falcon (144.3 cu. in.)	24-26	35-38	17-20	C	CsP	32-36	F	28@5.35°h	40N	Ho	4-5	16	16	15bte
FORD Falcon (170 cu. in.)	24-26	35-38	17-20	4bte	CsP	32-36	0@0°	24@6.3°h	40N	Ho	4-5	16	16	15bte
FORD Thunderbird	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	15@17°	65N	Ford	4½-5½	Au	Au	26bte
LINCOLN Continental	15	26-28½	17-20	6bte	VD	34	30@4000	22@18°	80N	Ca	5-6	Au	Au	22bte
MERCURY Meteor 600	24-28	35-38	17-20	10@500	VD	32-36	F	26@8.3°	55N	Ho	4-5	19	19	23bte
MERCURY Meteor 500 and Monterey (292 cu. in.)	14-16	26-28½	17-20	10@500	VD	32-36	23@4000	25@19°	55N	Ford	4½-5½	18	18	12bte
MERCURY (352 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	26@4000	25@16°	65N	Ford	4½-5½	Au	Au	22bte
MERCURY (390 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	15@17°	65N	Ford	4½-5½	Au	Au	26bte
OLDSMOBILE F85	13-18	28-32	19-23	5bte	CsP	40	26@4200	25@16°	40N	RP	4-5¼	Au	Au	22bte
OLDSMOBILE Dynamic 88	16	28-32	19-23	5bte	VD	30	26@4400	23½@21°	60N	RP	5-6	Au	Au	14bte
OLDSMOBILE Super 88 and 98	16	28-32	19-23	5bte	VD	30	26@4400	23½@21°	70N	RP	5-6	Au	Au	11bte
PLYMOUTH 6 Savoy, Belvedere and Fury	17-23	40-45	17-21.5	25bte	CsP	35	25@4400	20.6@12°	50N	Ca	4-5	10	20	8bte
PLYMOUTH 8 Savoy, Belvedere and Fury	14-19	27-32	17-21.5	5bte	CsP	35	20@4600	30@17°	50N	Ca-St	4-5	10	18	17bte
PLYMOUTH Super Fury	14-19	27-32	17-21.5	10bte	CsP	35	19@4400	23@13.2°	50N	Ca	4-5	10	18	13bte
PLYMOUTH Valiant	17-23	40-45	17-21.5	2.5bte	CsP	35	26@3850	25@14.5°	50N	Ca	4-5	10	20	8bte
PONTIAC Catalina and Ventura	16	30±2	19-23	6bte	CsP	33-38	22@3600	20@15°	K	RP	5¼-6¼	Au	Au	14bte
PONTIAC Star Chief and Bonneville	16	30±2	19-23	6bte	CsP	33-38	20@2850	20@17°	K	RP	5¼-6¼	Au	Au	14bte
PONTIAC Tempest 4	13-19	73-77	19-23	6bte	CsP	33-38	22@3750	20@15°	42N	RP	4-5¼	Au	Au	14bte/29bte
PONTIAC Tempest 8	13-19	73-77	19-23	5bte	VD	30-34	28@3700	16@15.7°	42N	RP	4-5¼	Au	Au	14bte/29bte
RAMBLER American De Luxe and Super	17-22	37-21	17-22	3bte	VD	33-37	14@4000	11@11°	40N	Ca	4-5¼	16	18	10bte
RAMBLER American Custom	16	28-35	19-23	8bte	VD	33-37	22@4000	22@16.5°	45N	Ho	4-5¼	12	16	12½bte
RAMBLER 6 De Luxe and Super	16	28-35	19-23	8bte	VD	33-37	22@4200	22@16.5°	45N	Ca-Ho	4-5¼	12	16	12½bte
RAMBLER 8 De Luxe, Super and Custom	14-19	28-32	17-22	tdcg	VD	33-37	36@3800	20@15°	50N	Ho	4-5¼	12	14	12½bte
RAMBLER Ambassador	14-19	28-32	17-22	tdcg	VD	33-37	36@3800	20@15°	60N	Ho	4-5¼	12	14	12½bte
STUDEBAKER Lark 8	17-22	37-41	17-22	2bte	VD	33-38	26@1800	16@13°	50N	Ca	3¼-5¼	J	L	15bte
STUDEBAKER Lark 8 and Hawk Coupe	16	28-32	19-23	4bte	VD	33-38	26@2200	18@13°	50N	St	3¼-5¼	J	L	11bte

ABBREVIATIONS

a—Powerglide 20@3600.
Super Turbo 24@4800.
Au—Automatic transmission.
Aut—Automatic.
Super Turbo 23@15.2°.
b—Powerglide 23@16.2°.
bte—Before top center.
C—2°bte manual, 6°bte automatic.
c—Super Turbo air 54bte.

Ca—Carter.
CsP—Crankshaft pulley.
d—Manual trans. 5bte.
Auto. trans. 10bte.
e—Manual trans. 5bte.
Auto. trans. 10bte.
F—Non centrifugal.
f—Auto. trans. 30°.
FW—Flywheel.
g—Auto. trans. 5bte.

h—Automatic transmission.
Ho—Holley.
J—23-25.
K—50 or 60N.
L—25-27.
N—Negative
RP—Rochester Products.
St—Stromberg.
VD—Vibration damper.
x—Auto. trans. 20@4600.

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Here's a brand new way to stock and sell spark plug cable sets. It's called Select-O-Lenth, and there are several things you'll like about it. In the first place, Select-O-Lenth completely eliminates the need for the big inventory you've been forced to carry. You'll find that Select-O-Lenth will cut your inventory investment by at least 70%. As its name implies, Select-O-Lenth consists of several lengths of pre-cut ignition cables (24", 36", 44" and 54"), each equipped with one of three different spark plug terminals (90°, 135° and 180°) . . . a total of twelve parts numbers in all. With them, you can assemble ignition kits for 97% of the cars on the road today . . . in less than one minute each. When you stock Select-O-Lenth, you'll be supplied twelve handy, punch-out-center boxes containing all the parts you need (including clips), plus a Select-O-Lenth selection chart showing how to combine the parts for use with any make and model of car. You'll save time, save space, save money when you stock the savers' dozen. See your Autolite supplier right now about new Select-O-Lenth. You'll be glad you did.



AUTOLITE



ACT NOW! Get this special bonus extra free. This compartmented utility cart to handle your entire Select-O-Lenth Assortment . . . or anything else you ask it to carry . . . is yours absolutely FREE from your Autolite supplier with your initial Select-O-Lenth order.



MONEY-SAVING...TIME-SAVING

IGNITION WIRE DO-IT-YOURSELF KIT



W. T. "Hooker" Vandergriff (left center) and Jack H. Hopeman, Jr., of Vandergriff Chevrolet Co., Arlington, Texas, both hold the Quality Agency Award presented them by J. W. Fischer (left), regional agency manager of Universal Underwriters Insurance Co. Looking on is Herbert J. Silver, manager of Vandergriff Investment Corp. The award cites the dealership for "repairs of the highest quality; expert training and qualification of all shop personnel; maintenance of modern, efficient shop equipment and consistently courteous, prompt handling of claims."

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SAYS:**

Others may claim their plastics are good, but



BLACK MAGIC

**DOES ALL
YOU EXPECT IT SHOULD!**

BLACK MAGIC is the original black plastic with the white cream hardener.

BODYMEN who know the work-saving, time-saving, extra mileage, elimination of do-overs and all around customer satisfaction in results insist on demanding **BLACK MAGIC**.

THEY KNOW its sure **FREE-DOM** from **FUMES** and **ODOR** and **ITCH** and **90% LESS DUSTING** are too important to overlook.

FREE!

$\frac{3}{4}$ lb. can of **BLACK MAGIC** plus "Good Hints when working with Cream Hardening Plastics" will be sent you **FREE** upon receipt of your letterhead with name and address—also your jobber's name and address.

SWISS LABORATORY, INC., Cleveland 14, Ohio

"One of America's Largest Independent Manufacturers of Body and Wire Solders"



TorqueFlite Transmission

(Continued from page 38)

ment of the front clutch.

The second function of the shuttle valve is to regulate the application of the kickdown piston when making high speed (above approximately 30mph) kickdowns. Kickdowns made at low vehicle speeds require very little time in which to complete the shift due to the comparatively small change in engine speed between direct and kickdown gear. The higher the vehicle speed at which the kickdown is made, the longer is the time required in order to make a smooth shift.

Mountain driving:

When driving in the mountains with either heavy loads or when pulling trailers, the 2 (second) or 1 (low) position should be selected on upgrades which requires heavy throttle for one-half mile or more. Lower ratios reduce the possibility of overheating the transmission under these conditions. The 1 (low) position is for severe operation or to obtain better control.

Towing (transmission inoperative):

Tow the vehicle with a rear end pickup or remove the propeller shaft.

Transmission operating properly:

The vehicle may be towed safely in N (neutral) at moderate speeds. For long distance towing (over 100 miles), the propeller shaft should be removed.

Jacksonville Elects Tucker

New president of the Jacksonville (Fla.) Automobile Dealers Association is Holmes Tucker of Claude Nolan, Inc. (Cadillac-Pontiac). Vice president is Lee Powell, Jr., of Powell Plymouth and Gordon Thompson, Jr., of Gordon Thompson Chevrolet, Inc., is treasurer. Allen L. Poucher, attorney, is managing secretary.

Now Du Pont Telar[®] ANTI-FREEZE AND SUMMER COOLANT

has a new low price... only \$3.95*
A GALLON



"Telar" is now only \$3.95 a gallon. So for '61 "Telar" becomes the premium anti-freeze product at a new low price... a price that's going to have more of your customers asking for "Telar". Think of it! The proven, long-lasting anti-freeze, anti-

rust and summer coolant that can be used year after year, summer and winter... that you can sell with confidence to all of your customers... for just a little more per gallon than standard anti-freezes you install.

Be ready to go both ways... sell ZEREX and TELAR

ZEREX[®] anti-freeze with MR-8 rust inhibitor... finest permanent type anti-freeze.



TELAR[®] anti-freeze and summer coolant protects year after year.



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

*Fair Trade price in those states where applicable.

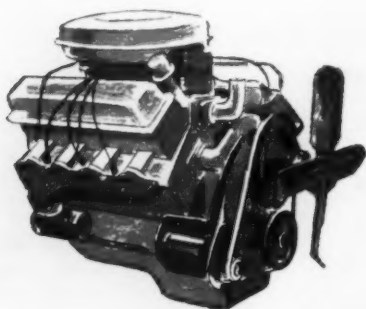
Here are the facts that will help



"Telar" is installed just like you've been installing "Zerex" all these years, quickly and without fuss. "Telar" is not a difficult-to-handle full-fill product—no need to waste space stocking water. "Telar" and tap water in the proper proportions make the best anti-freeze, anti-rust and summer coolant on the market. And the amount of "Telar" your customer needs is *exactly the same* as the amount of "Zerex" you would install.



"Telar" does its work effectively year after year, winter and summer. The "Telar" you put in now will protect your customer's cooling system for as long as he keeps his car (requiring only occasional make-up). That's because Du Pont spent years of research in developing a rust inhibitor so effective it lasts year in, year out. This long-lasting protection, plus new low price, will make "Telar" appealing to many more of your customers.



"Telar" is recommended for cars with aluminum engines. Years of research have proven that "Telar" completely protects the aluminum now used in many car engines. Same goes for *all* other metals in the cooling system . . . copper, iron, steel, etc. "Telar" is a modern product for modern cars. You can recommend it with confidence to all of your customers.



"Telar" is effective as a summer rust inhibitor and coolant, too. Many anti-rusts on the market today do not protect as well as "Telar" in the summer—when the threat of rust and corrosion is greatest. With "Telar" in the cooling system, there is complete protection from rust and corrosion. And "Telar" has a higher boiling point than water. Many dealers got a jump on the anti-freeze season last year—by recommending and installing "Telar" in July and August, before the first-freeze rush.

Be ready to go both ways . . . sell ZEREX and TELAR

ZEREX® anti-freeze
with MR-8 rust inhibitor
. . . finest permanent type
anti-freeze.



TELAR® anti-freeze and
summer coolant protects
year after year.



you sell Telar[®] ANTI-FREEZE AND SUMMER COOLANT in 1961



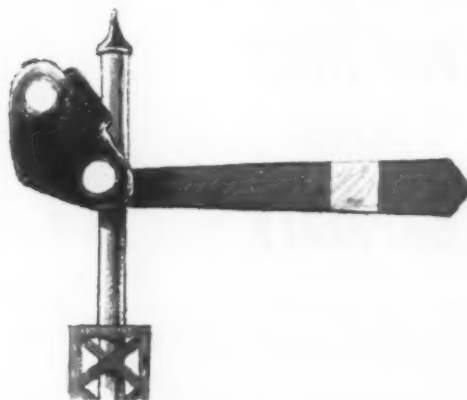
At only \$3.95 a gallon, "Telar" is now the most economical long-lasting anti-freeze, anti-rust and summer coolant money can buy. If your customer plans to keep his car for more than one winter, the cost for protection with "Telar" can average out to dollars less than the cost of two fills with one-year anti-freezes. And remember . . . with "Telar" your customer buys only the anti-freeze protection he needs. No need to protect to 40° below zero if he doesn't need it.



"Telar" is sold through servicing dealers. Again this year, like last, you'll find "Telar" where it belongs—in service stations, garages and car dealerships. At \$3.95 a gallon, there's a lot of profit in selling "Telar"—and that profit is yours exclusively.



There's profitable make-up business for you with "Telar". Under normal driving conditions, a certain amount of loss through leakage and overflow is unavoidable with any anti-freeze. So once in a while, you'll find that your customer's radiator needs some make-up. In the summer you can add plain water; in fall and winter you'll add some "Telar". You build up a steady, repeat business that's fast and profitable.



Color Check is an added safeguard! Du Pont has proven that the super rust inhibitor in "Telar" can be expected to outlast your customer's car. To be sure he will have complete anti-rust protection at all times, a Color Check feature was added to assure him the rust inhibitor is continually doing its job. "Telar" is the first anti-freeze with such a safety feature. If "Telar" turns from normal red to yellow (and this rarely happens), the solution should be replaced, because it is no longer fighting rust, even though it may still be giving anti-freeze protection.

IMPORTANT NOTE TO DEALERS: You'll probably never have a customer whose "Telar" turns yellow. But if you should, you replace it immediately with the amount initially installed. Then return to Du Pont the installation certificate issued to the customer at the time of initial installation. Du Pont will immediately replace your stock with the amount of "Telar" you replaced. **IMPORTANT:** Du Pont, of course, does not take responsibility for loss of "Telar" from any cause, such as leakage, overflow, etc.

Complete details for replacement of any "Telar" which has turned yellow, along with original installation certificate for your customer, will be found in the Du Pont point-of-sale Dealer Kit.



REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

Dealers Can't Figure

(Continued from page 41)

however, is exactly the reverse. They start with high expense, and try to get sales volume to cover it. That is not the way to run an automobile business.

As careful as we are with cost control, we sometimes get too much inventory in new and used cars. Sometimes our expenses go too high. But we keep a daily operating control system, and the moment inventories or expenses get out of line,

we can act to correct the situation.

My company sold more than 3,500 new and used cars last year, and we had control figures every business day. It cost us in total company expense \$294 to sell every new car that we sold last year. It is easy for me to understand that if we sold a car for less than \$294 over invoice, we lost money. What I can't understand is how dealers selling for \$50 or \$100 over invoice can make a profit. I don't believe they can either.

Some dealers tell me they are too small to keep a cost control system,

but it seems to me it would be easier for a smaller dealer than a large one. At least he'd have fewer areas to decide on which and how to cut costs.

Our greatest sin in the automobile business is the sin of omission. The next greatest is our hope of getting our money out of used cars and trucks. Every one of them able to run on four wheels has a value, but they will bring what they are worth, and that is all. It might surprise some to say that we make money on our used trucks simply because we trade them for what they are worth. The point I'm making is, what good does it do a dealer to make any deal without a profit? We are in business to make money, not just to change it.

Another specific to watch is a heavy inventory. Some call it an asset, but banks know differently. Banks are far more lenient with loans on reasonable inventories.

What all this boils down to is that to improve your financial position, you should know where you've been, where you are and where you're going, or, at any rate, where you're trying to go. Otherwise, you are very apt to get lost.

NEW SUPER-POWERED "750" HYPRESSURE JENNY®

**100 GALLONS
PER HOUR
PUMP
CAPACITY**



SAME LOW, LOW PRICE

plus the features that make Jenny the world's most practical steam cleaner

This is it! Greatest buy in steam cleaners—Homestead's new super-powered "750" Jenny with 100 gallon-per-hour positive displacement pump! Also, its new-design angle cleaning gun blasts away grease and dirt, with less operator fatigue.

Among the great options offered for the new "750" Jenny are convenient, cost-cutting nozzle control for remote operation; cooling system cleaning attachment; and a choice of oil- or gas-fired, portable or stationary models.

Feature for feature, the new super-powered "750" Jenny offers MORE for your steam cleaner dollar; and every part or accessory is backed by Homestead's quality workmanship and reputation. Call your Authorized Jenny Distributor today; or mail the coupon for more information.

- New swivel, angle grip cleaning gun.
- New high impact nozzle.
- Choice from full line of optional features.



HOMESTEAD VALVE MANUFACTURING COMPANY
Hypressure Jenny Division, Coraopolis, Pa.

In Canada: Hypressure Jenny Sales & Service, Ltd.
517 Jarvis St., Toronto 5, Ontario. (C.S.A. approved.)

**MAIL
THIS
HANDY
COUPON**

Please rush me full information about Homestead's new super-powered "750" Hypressure Jenny Steam Cleaner.

Name.....Position.....

Company.....

Address.....

City.....Zone.....State.....

99

Bearings: Safety Road

(Continued from page 48)

we want them back in 5,000 miles on a wheel bearing repack.

Every repair concerned with safety gets its routine road-test before the customer picks up his car. But our parting words to our customers before they pull out remind him to return for checking our own work.

This brings repeat business. Customers get in the habit of looking to you for responsible workmanship. Often this does not yield an immediate sale, but neither the time nor motion is lost. The more frequently he comes back, the more engrained the habit, and the closer you get to his automotive troubles.

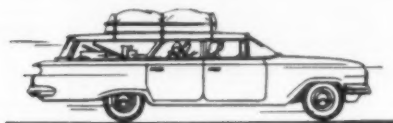
This team of you and him concerned with the safety of his car gives him a much greater sense of security.

Plant City Dealers Elect

The Plant City (Fla.) Automobile Dealers Association has organized and elected B. M. Smith, Jr., of B. M. Smith Motors (Rambler) president. Alvin Dollar of R. M. Fletcher Motors, Inc. (Ford-Mercury), is vice president and Sim C. Sparkman of Transportation Sales (Oldsmobile-GMC-Jeep) is secretary-treasurer.

HEAVY LOADS can mean LOADS OF SALES for you!

This new oil-air rear suspension is specially built for your customers with vehicles carrying heavy loads. Sell them on the extra carrying capacity which provides a level ride and prevents rear-end sag and bumper drag. Show them the external valve that makes it easy to increase air pressure for extra-heavy loads. Now your customers can enjoy a perfectly smooth ride, regardless of whether their cars are empty, lightly loaded, or fully loaded.



BRIGGS

LOAD ABSORBERS

The Briggs Shock Absorber Co.
Cleveland, Ohio



Porto-Matic...

Patent Pending




Give Your Shop
an
**EXTRA
MAN**

Give Every
Man
an
**EXTRA
HAND**



P-707 Pump
\$79.95*

S-202 Porto-Matic set
complete with pump, hose
and ram couplers \$99.50*

now... body and frame
repair shops can enjoy
**GREATER PROFITS...
OUTPUT, SKILL & EASE** 

Porto-Matic, the revolutionary air-hydraulic pump, solves major problems for the men who must straighten modern cars. Bent and twisted steel must be worked while it is tensed — yet, repeatedly relaxed as the job progresses. No longer is it necessary to stop for *hand operation* of a pump and valve — a delay

that eats up man hours and handcuffs the craftsman!

With Porto-Matic, you can make faster, easier set-ups... you eliminate need for bringing over an extra man to operate the pump. And one man can easily dolly, ding, weld, inspect and adjust without dropping his work tools.



Porto-Matic FREES BOTH HANDS because it operates with a touch of a



the NEW air-hydraulic pump... creates a "THIRD HAND" for users of *Porto-Power*® and other remote-control jacks!



and *Porto-Matic* is so easy to own... you will want to **POWERIZE ALL THE WAY!**

The exclusive, foolproof Porto-Matic is **LOW COST!** It pays off so fast that you will want to convert **ALL** your Porto-Power and other remote-control jacks immediately! Ask your Blackhawk Porto-Power jobber, or write us, for Porto-Matic catalog P-52-A. It describes how easy it is to change over to air power — and how the popular Porto-Power equip-

ment, such as Dozer body and frame straighteners, are now available with Porto-Matic. Blackhawk Mfg. Co., Dept. 614 Milwaukee 46, Wisconsin.

ANOTHER ESSENTIAL WORK-SAVING PRODUCT FROM BLACKHAWK

10604  **Porto-Power®**
made only by **BLACKHAWK MFG. CO., Milwaukee 46, Wisconsin**

Suggested User Prices*

P-707 Porto-Matic	
Air-Hydraulic Pump Only	\$ 79.95
S-202 Porto-Matic, hose & couplers	\$ 99.50
EK-61 Damage Dozer with Porto-Matic	\$1024.00
Monthly Payment	39.67
EK-41 Unit-Dozer with Porto-Matic	\$ 729.00
Monthly Payment	28.70
EK-21 Power-Dozer with Porto-Matic	\$ 429.00
Monthly Payment	26.10
EK-9 Bantam-Dozer with Porto-Matic	\$ 269.00
Monthly Payment	18.73

*Prices subject to change without notice

Readers are invited to contribute to—

SHOP TALK

"OLD TIMER" ON PISTONS

San Antonio, Texas

Dear Technical Editor Lowery:

I was reading about you and some of those old timers in the last issue of SAJ, and it is comforting to know that some of us are still around.

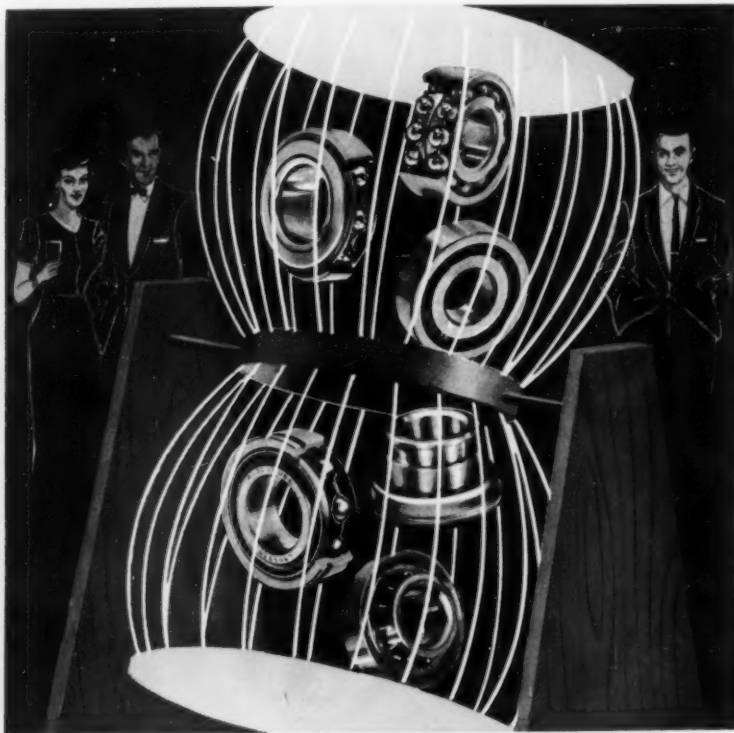
I recalled the old days recently

when I called one of these "quality" and "precision" machine shops to "mike" a Plymouth six for me.

Now on these jobs, if a cylinder has a .009 taper, I insist on these "machinists" expanding the piston .009 so that I may obtain a nice, snug fit. If they don't do it, I send them back and call the "head man"



A column of informal comments about the automotive trade and its problems.



A TURN FOR THE BETTER

L & S Bearings **have** to be better! Today's severe driving conditions demand it . . . and precision built L & S Bearings meet and surpass all tests. Customer acceptance is a good gauge of quality and performance. So turn to L & S Bearings . . . for service . . . for satisfaction . . . and for more profitable sales. It will be a turn for the better!

L&S BEARINGS

L & S BEARING CO. OKLAHOMA CITY, OKLAHOMA.

as to my requirements.

This particular job, however, needed reboring and, according to his "miking," the crankpin was "on the money" at "standard" size. He declined to even guess at the main journal size (the engine was on the chassis and I had no intention of removing it or the caps), but I assumed that if the crankpins were "on the money" then the mains would also be "standard." Anyway, I let him bore this block.

Upon completion of this job, I tried the new oversized pistons in his bore job and found to my horror that the piston would fall through like a rock, once aligned to the cylinder wall!!! So we (there are four of us) took a .004 feeler gauge and placed it between the piston and cylinder wall just about one inch from the thrust face, and we could still move that piston. In fact, the farther away we moved that gauge, the looser it got! This, to us, means piston slap, and he had the audacity to tell us that we would be in a hell of a shape if we could not get that .004 feeler gauge at that "drop."

Well, anyway, we decided that if he could miss his size at the cylinder, he could miss it somewhere else, too. Sure enough, we tried a standard-size rod bearing and main on that "standard" crank and the whole business was loose as a goose. Fortunately, I have a man who has an outstanding knack for fitting

Address any comments to: Southern Automotive Journal, 1760 Peachtree Road, N.W., Atlanta 9, Ga.

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PHONE: WO 1-2147
Dothan
Hollis & Spann,
Contractors
203 Montezuma St.
PHONE: SY 2-1391
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Putman Const. Co.
120 Leeman Ferry Rd., SW
PHONE: JE 6-6337
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PHONE: AM 4-3207
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PHONE: GI 7-4561
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Charles Temerson & Sons
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PHONE: FR 6-7741
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Atlantic Steel Co.
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PHONE: TR 5-3441
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P.O. Box 63
PHONE: PA 4-8208
Brunswick
F & H, Inc.
P.O. Box 960
PHONE: AM 5-2641

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PHONE: SH 3-7437
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Extension
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PHONE: PA 3-2494
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PHONE: MI 7-5245
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BEFORE YOU BUILD...BUY...
OR RENT...CHECK THE ADVANTAGES
OF LOW COST **DIXISTEEL** BUILDINGS



now with DixiRib Perma-Color Panels

If you need new or additional space, large or small, one of the 1200 standard units in the Dixisteel Building line is sure to fit your requirements.

These all-steel rigid-frame buildings are pre-engineered and precision-fabricated to provide low-cost structures in a matter of days - not months.

Six beautiful, modern colors are now available in DixiRib Perma-Color panels. Baked enamel vinyl finish assures longer life with minimum maintenance.

Get the facts about Dixisteel Buildings from your nearest dealer or write us direct for descriptive catalog.

- Over 1200 standard units in the Dixisteel Building line
- Standard 4:12 or 1½:12 roof pitch
- Beautiful DixiRib Perma-Color Panels in six factory-applied colors
- Rigid Frame, clear-span construction - no posts or trusses - maximum usable interior space



CHEAPER THAN RENT-LOW COST FINANCING AVAILABLE
FREE ESTIMATES-NO OBLIGATION



STEEL BUILDING DIVISION
Atlantic Steel Company

P. O. Box 1714 • Atlanta 1, Ga. • TR 5-3441

bearings and by shimming up the bearings with .002 and/or .003 shim stock, we acquired the snug fit that fine fitting calls for. It is for this reason that I never, never hire so-called "trained mechanics." I train my own, my way. One of my men could overhaul seven Chevrolet engines a day—that's how good he is.

Anyway, when I asked this "machinist" what the clearance was supposed to be between his bore and my piston, he didn't know!! Instead, he says that the manufacturer of the particular piston decides that,

and that all he was concerned with was that the bore was correct at the oversize he bored it: $3\frac{3}{4} + .020$.

"Most piston boxes have a chart inside so that the piston grinder will follow that specification in case of grinding the piston," he stated.

Some machinist!

I fit my own pins on a modern wet reamer and when I assembled my reamed rods to those pistons, I found that the pin was turning in the piston bosses!!

After all these painful experiences, I wondered whatever happened to

those old-timer machinists who worked on those Overlands, Willys Knights, Chandlers and Maxwells, when you really had to use your brains and actually have the know-how. That was when the word "journeyman" meant something, and they would really put these young pipsqueaks who brag about 15 or 20 years' experience as "machinists" to shame.

DICK O. MARVIN, JR.

PARENTS IN PRINT

Albany, Ga.

Dear Sir:

In your March issue, pages 164 and 165, appeared a picture of a 1920 South Carolina Automobile Trade Association convention at Isle of Palms. My mother and father are just above the "Photo by Sergeant" sign in lower right-hand corner. I don't know the gentleman between them.

MRS. ALBERTA NIX

A lot of other people can turn back now to see if they recognize your father, the late Eddie Jenkins of Jenkins Automotive Parts Service, Inc., Columbia, S.C., one of the most colorful automotive men (and bicycles in his earlier career) of the Southeast. It was good to hear from Mrs. Nix, the wife of Richard "Dick" Nix, who is employed by Keenan Auto Parts Co. A brother, Eddie Jenkins, Jr., who directs Jenkins Automotive Parts Service, has long been active in the Automotive Engine Rebuilders Association and in the South Carolina Automotive Wholesalers Association.

BOUQUET FOR SAFETY

Washington, D.C.

Dear Sir:

May we extend our congratulations to you for again doing an outstanding job in behalf of traffic safety. We appreciate very much the prominence you have given our article [in the April annual safety issue] on the National Vehicle Safety-Check program, which we are certain will result in encouraging the participation of your many readers in this program.

We also noted with interest the article "Seat Belts Make Comeback," which is particularly timely. By this time you have undoubtedly received the release and other information concerning the "Women's Crusade for Seat Belts" being co-sponsored by the General Federation of Women's Clubs and our Committee. It
(Continued on page 75)

HANSON'S

Key Features Prove
Quality of
Product

and
open the door
to more and more
tune-up profits



- Automatically adjusts to 6 or 12 volts.
- No switches to remember to throw or relay to stick.
- Imported lens directs light with pre-focused accuracy.
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All 42 HANSON Testers Are Top Quality, Fully Guaranteed and Complete with Instructions



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ALL-NEW ARO LUBE LINE

TO MAKE YOUR BUSINESS CAR CARE HEADQUARTERS



SAFE ARO GARD

New Aro Safe-Gard Portable Lube Equipment is available in a complete line . . . precision engineered and smartly styled to help you do more car maintenance business.

Dress up the lube bay and dress up the profit statement with all-new Aro Safe-Gard Reels. Provide fast, sure command of lubes, motor oil, air and water. Loaded with features for lasting satisfaction.

SETS YOU UP TO SELL COMPLETE CAR MAINTENANCE JOBS FOR SAFE DRIVING...KEEP BUSINESS AND PROFITS GROWING!

Today's motorists are sold on complete car care service for safe, trouble-free going. They hear about it, read about it, drive in where it's offered. Any dealer who hopes to prosper had better provide it. And that calls for new ARO Safe-Gard equipment—for complete chassis, gear, A. T. F., motor oil, air and water service. New ARO Safe-Gard Lube Equipment will step up speed and efficiency, let you turn out good work faster. And its clean-lined, modern styling captures customer confidence . . . assures repeat business. All this, plus ARO-engineered dependability (backed by an exclusive warranty) that's unmatched in the industry. See your Aro Representative soon.



AUTOMOTIVE SERVICE EQUIPMENT

The Aro Equipment Corporation, Bryan, Ohio
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 Factory Branches: Buffalo, Chicago, Cleveland,
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 Minneapolis-St. Paul, San Mateo, Calif.
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Complete Line of Automotive Service Equipment



Presenting...



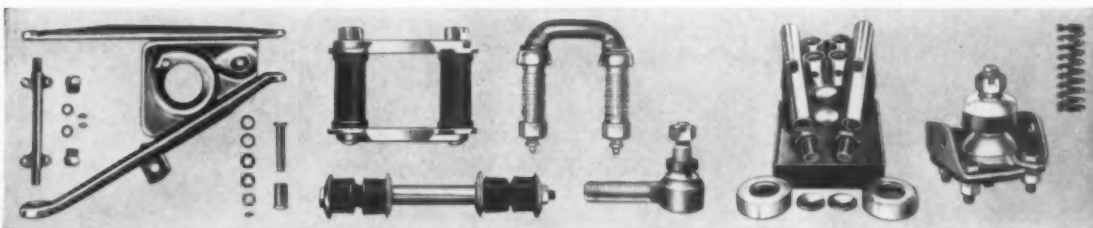
Ball joint with
nylon sheath
New tie-rod end

A Complete Line of Original Equipment CHASSIS PARTS

For the Automotive Service Trades

Permite Preferred chassis parts sell easier, faster and more profitably because they are original equipment parts, not imitations. Parts machined and finished within the close tolerances specified by manufacturers invariably fit perfectly and restore vehicles to "good-as-new" performance.

The Permite name means *customer satisfaction*. Suspension parts give outstanding service. King bolt sets have strength and toughness for strenuous use. Spring shackles smooth out the road and eliminate noise. Tie-rod ends insure easier steering and positive control, with the *safety* of dual bearings.



CALL YOUR JOBBER FOR: Front End Suspension Parts • Steering Knuckle Supports • Control Arms • Coil Springs • Ball Joints • Tie-Rod Ends and Repair Kits • Spring Bolts • Spring Bolt Bushings • Spring Attaching Assemblies • Spring Shackles • Stabilizer Links • Drag Link Assemblies • King Bolt Sets

*The Most Complete Line of Engine and Chassis Parts Available
... Bearings, Pistons, Cylinder Sleeve Assemblies, Valves,
Water Pumps, King Bolt Sets, Tie Rod Ends, Drag Link Assemblies,
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Front End Suspension Parts . . . Today's Bigger and Better
Line of Permite Preferred Parts. Call Your Jobber!*

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VAL F. REICH III

HOLMES Factory Representative in charge of Sales and Service for INDIANA, OHIO and Western part of WEST VIRGINIA.

**"Let HOLMES Versatil-ity*
Put EXTRA PROFITS
into YOUR BUSINESS"**

HOLMES 460 MODEL



***ONLY HOLMES Provides For such a VARIETY of WORK** ➔

It's comparatively easy to pick-up *extra profits* when a Shop or Service Station is equipped to render "Modern Road Service" with a HOLMES Power-Operated WRECKER. The use of such a versatile unit *does* provide many profitable Operations. It opens the door to entirely new avenues of *earning* by permitting the operator to go miles away . . . for jobs he would NOT otherwise obtain. Fast, Efficient handling of such jobs pays handsome dividends in TOWING FEES—PARTS SALES and SERVICE WORK.

All HOLMES Double-Boom WRECKER Models are engineered to provide 360° working area for the most efficient use of truck power for *lifting, pulling* and *towing*. Booms may be positioned for anchoring on one side while pulling from the other—without blocking road passage. There are 7 Holmes Wrecker Models varying in price and ranging in size from 3 to 40 ton capacity that are NOW available on EASY TERMS. Send TODAY for full details. Let us show you HOW a new HOLMES WRECKER will put Extra Profits into your Business.



HOLMES Ad-Mor Length Boom BROADENS WRECKER SERVICE

Here's an accessory that permits any HOLMES Double Boom WRECKER to handle various types of Commercial jobs. Lifting of airplanes, boats, building materials, industrial equipment and numerous other big, bulky objects. The Boom can be assembled quickly into any desired length from 6 to 38 feet by adding standard 8 foot sections. When fully extended, Boom has a rated capacity for lifting 1 ton 38 feet. Send Today for details on this important money-making accessory.

HOLMES
Wreckers



ERNEST HOLMES COMPANY

Chattanooga 7,

Tennessee

Shop Talk

(Continued from page 70)

is our belief that the General Federation, with its 16,000 local clubs and five-and-a-half-million members, will do much to encourage the use of seat belts to help in the reduction of disfigurement, disablement and death resulting from traffic accidents.

Thanks again for your cooperation and congratulations for an excellent issue in support of safety.

M. R. DARLINGTON, JR.,
Managing Director,
Auto Industries Highway Safety Committee, Inc.

MANY CALLS A DAY

J. E. "Joe" Bickel, vice president in charge of merchandising, Monroe Auto Equipment Co., and president of the Automotive Electric Association, was calling on accounts in western Texas some years ago.

He reported in to his employer on one day.

"Instead of wanting to know how many orders I had written that day, he wanted to know how many calls I made. I told him 17 and that I would have made more except some fool stopped me and wanted to know what I was trying to sell," he said in an address before the annual convention of the Automotive Wholesalers Association of Tennessee at Memphis.

BURSTED FORTITUDE

Fred Bauer, Jr., president of Bauer Auto Parts, Memphis, Tenn., passed this story along (as the truth):

"Fred Bauer, Sr., board chairman of the Memphis organization, suffered a ruptured ulcer while fishing at Pickwick Lake. The doctor said it was the result of a resolve to catch every fish in the lake or 'bust a gut.'"

"After emergency surgery, the patient is doing fine."

ST. PAUL MOSQUITOES

From convention headquarters of the Independent Garage Owners of America in St. Paul, Minn., comes this enticing bit of information to lure conventioners St. Paul-ward on June 28-July 1:

"We want everyone to know that there isn't a single mosquito in St. Paul. They are all married and have large families!"

"FREE" MEMPHIS WATER

You get a lot of information (and, sometimes, well-adjectived opinions) listening to taxi drivers as you travel all over this booming Southland.

For example, a Memphis driver was telling SAJ editors last month about the great supply of artesian water impaled below that city along the Mississippi River. The larger downtown buildings are supplied by their own wells, saving great sums of money on the usual needs for

water, including the hungry air-conditioning plants.

Residences and small businesses depend on the city system for their water in the Shelby County city.

Atlanta, Ga., also has some large buildings tied in with their own water sources.

Do you have any good shop ideas? Shoot them to us—if you want seven bucks. (See page 121.)



"Now We're Selling Tubeless Valves We Used to Give them away..."

"Since we got our Dill Dispenser-Pak, we have been charging \$1.00 plus 3 cents Sales Tax on every tubeless tire valve," says Boyd Custer, owner of Custer's Shell in Cuyahoga Falls, Ohio.

"Until I saw that new package with the dispenser, the mobile, and the safety gage all together, I had never thought much about charging for

snap-in valves. It was then I realized that each valve cost me about 41¢, so I was giving away a big hunk of my tire repair profit. Now I charge for every valve, make 59¢ profit and haven't had a single customer complaint."

Ask your supplier about the new Dispenser Pak . . . you pay no more to have valves at your fingertips.

DILL Manufacturing Company
700 East 82nd Street • Cleveland 3, Ohio
Offices in Los Angeles, Akron, and Toronto

Dough in Our Suds

(Continued from page 39)

we had to keep one of our wash personnel on for three hours at night, it proved worthwhile. A good wax job takes three hours of buffing.

Our overhead water spray cost us \$500 about six years ago. We have had no maintenance expense on it during this period it has been in daily use. Using a cup of detergent in each of the five-gallon pans of water placed at either side of a car, two persons wash a car, rinse it with

overhead spray, then hand-dry it with turkish towels. Soft towels bought as seconds by the dozen are used first by our waxer for wiping the car down, then become soft and absorbent after a thorough washing, and are in just the right state for drying cars after a washing.

Wash personnel can be trained in two days by experienced men. We have no trouble whatsoever retaining wash employees. Working indoors in a heated area, wash personnel are further protected with rubber aprons and rubber boots, which we

furnish along with laundering their uniforms weekly. Moreover, their wages are in excess of what is paid generally in this area.

We have tried incentive commission plans of various kinds, but have proven beyond doubt that personnel well paid and treated with respect and consideration produce to the maximum of their ability and sell intelligently where needs and defects exist.

Throughout the year when the weather is good, we have more wash volume than we can handle normally. If by 3 p.m. it appears cars may not be ready for delivery, we throw in an extra man or two to get faster turnover.

When weather is very bad and wash jobs drop off, we put wash personnel on cleaning the shop or showroom, generally putting the place in order.

Comebacks on wash jobs are a rare occasion. If they do happen, we do not quibble about the \$1.50. We go over our work to the customer's satisfaction or refund his money happily. It is far wiser to keep on amicable terms with our good customers.

Supermarket Proposal Dropped in Tennessee

A PROPOSED "supermarket" for retailing new automobiles in one of Tennessee's major cities has been abandoned, according to a Tennessee Automotive Association bulletin, because of service provisions and requirements of Tennessee Motor Vehicle Act.

The bulletin stated:

"The firm which had contemplated this action decided after being advised of the requirements of the law that they couldn't profitably establish the expensive facilities needed for parts and service and still conduct the mass peddling operation which has proven so destructive to the industry in other sections of the country.

"It would seem that in this one instance alone the Motor Vehicle Commission Act has made worthwhile the years of struggle which TAA and its legislative committee, headed by Senator Carroll Oakes, made for its enactment."

Greensboro Firm Marks 47th

Gate City Motor Co., Greensboro, N. C., celebrated its 47th year last month. The company was formed in April 1914 and became one of the first dealerships to begin selling Chrysler cars in 1925.

SELL THE BRAND IN DEMAND!



FIRST EVERY YEAR
WITH ALL THE
NEW CAR COLORS



With the EXTRAS that give you the selling edge on competitive brands!

- The No. 1 choice of those who buy and expect a dependable, accurate color match for their car.
- Beautifully packaged in full color litho cans — means an always clean, fresh and attractive stock.
- Handsomely displayed in all types of merchandisers to fit your exact needs — UNSURPASSED point-of-sale promotion to ring up more impulse, self-service sales.
- The ONLY positively tamperproof cap seal — and the ONLY cap that **relocks** after use. **SPRA-LOK** prevents accidental or intentional spraying at point of sale.

YOU GET A FULL MARK-UP!

ADVERTISED IN
LIFE

RETAIL FAIR
TRADE PRICE
\$1.49
PER CAN



FINEST QUALITY AUTOMOTIVE LACQUER-ENAMEL

DUPLI-COLOR[®]

AUTO SPRAY*

AEROSOL DIVISION • DUPLI-COLOR PRODUCTS CO., INC., 2440 S. MICHIGAN AVE., CHICAGO 16, ILL.

* ALSO MANY OTHER USES AROUND THE HOME, SHOP OR OFFICE!

NOW...the new

McQUAY-NORRIS

MI-1000

ENGINE BEARING

EXTRA

- ✓ Durability
- ✓ Conformability
- ✓ Imbedability



THE *Blue Box* LINE.

... synonymous with quality

The **MI-1000** engine bearing has an "extra thin" babbitt lining only .001 of an inch thick, electrolytically applied on a hard and durable sintered copper-lead base. The **MI-1000** has the fine anti-friction qualities of babbitt plus the terrific strength of copper-lead—so it is easy on the shaft, yet won't pound out under the most severe service.

The combination of the **MI-1000** plus McQuay-Norris Heavy Duty, Chrome Control, Leak-Proof Piston Ring set, not only keeps the job running longer, but also cuts gas and oil costs.

Let your McQuay-Norris Wholesaler supply you with the new **MI-1000** engine bearing!



the new **MI-1000**
ENGINE BEARING

1. Precision Steel Back
2. Sintered Copper-lead Lining
3. Barrier Plate
4. One thousandth of an inch Babbitt Overlay
5. Pure Tin Flash

McQUAY-NORRIS

McQUAY-NORRIS
MANUFACTURING CO.
ST. LOUIS • TORONTO

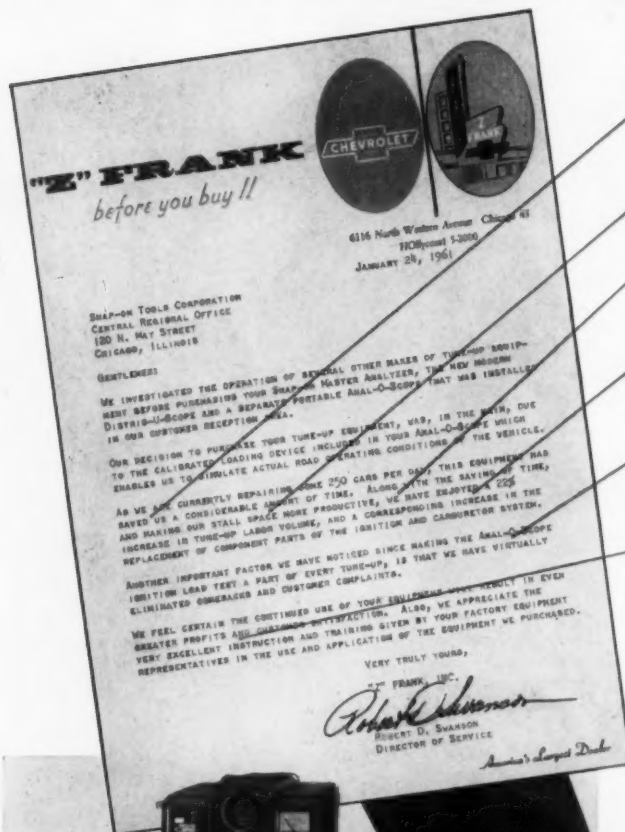


read what "Z" Frank

ONE OF AMERICA'S LARGEST DEALERS

says about **Snap-on**

TUNE-UP EQUIPMENT



SAVED US A CONSIDERABLE
AMOUNT OF TIME

STALL SPACE MORE PRODUCTIVE

22% INCREASE
IN TUNE-UP LABOR VOLUME

INCREASE IN THE REPLACEMENT
OF COMPONENT PARTS

VIRTUALLY ELIMINATED COME-
BACKS AND CUSTOMER COMPLAINTS

EXCELLENT INSTRUCTION
AND TRAINING

A featured area of "Z" Frank's new Giant Service Center is the tune-up and diagnosis department — completely equipped with SNAP-ON shop equipment.

Here, where the customer is king and the emphasis is on quality, efficiency and speed, the tools must match the job to be done. That's why a SNAP-ON Master Analyzer®, Distrib-U-Scope® and Anal-O-Scope® were decided upon after investigation of several makes.

Robert D. Swanson, Director of Service, trained 16 men in the use of the equipment with the help of SNAP-ON experts. Eventually the tune-up tools will be available and manned around the clock.

There's no trick in getting your share of the benefits when using SNAP-ON tune-up equipment. Your SNAP-ON man can tell you more about the tools you need to make YOUR job easier, faster, more profitable. Ask him for a demonstration.

Mechanic uses SNAP-ON Master Analyzer on one of 250 cars that go through the "Z" Frank Giant Service Center daily.

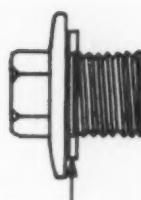
SERVICE-BACKED SHOP EQUIPMENT

SNAP-ON TOOLS

8052-F 28TH AVENUE • KENOSHA, WISCONSIN



Nylon Gasket



Copper Gasket

Nylon Drain Plug Gasket Announced by Plymouth

Two engine oil pan drain plugs were used in production on 1960 and 1961 six-cylinder Plymouth and Valiant engines. The original drain plug had an extruded head, while later plug had a thin machined head to provide additional steering linkage clearance. (See sketch above.)

According to a bulletin issued by Plymouth Division, a new nylon gasket, part No. 1855248, has been made available for the oil pans equipped with the thin machined plug. This gasket is wider and thicker than the copper gasket and minimizes the possibility of oil leakage at this point.

The extruded head oil pan plug will continue to use copper gasket, part No. 2129963. The nylon gasket is not to be used on the extruded plug.

Onan Division Sets Up Fuel Cell Research

BASIC research into fuel cells—a new source of energy that some day may supplant present internal combustion engines in automobiles—has been initiated by Onan Division of Studebaker-Packard Corp.

The "literally unlimited opportunities for increased efficiency in the generation of electric power" were outlined by C. W. Onan, president of the division, at ceremonies dedicating the new research and development center.

"Use of a practical fuel cell can produce substantial fuel cost savings," Onan said. "And through the continuing conversion of chemical energy into electrical energy within a cell similar to a battery, operating efficiencies of up to 80% are possible."

Since the cell would be a relatively simple device without moving parts, compared with the "complexity of motion in a gasoline engine," Onan envisioned the day when these cells might replace present automobile engines.

"A car with fuel cell power," he

said, "would have an electric motor and thus would not need valves, pistons, spark plugs, an ignition system, transmission, muffler or storage battery."

Advantages Onan cited were:

"Fuel cells are noiseless and generate relatively less heat and toxic fumes than do internal combustion engines. They are like batteries—but do not wear out or need recharging, and are lighter in weight," it was explained.

Garage with Trimmings

(Continued from page 47)

just had to tell him flatly we couldn't give him the discount, so he took his business to the dealer. But within about three months we got the business back. Our customer found out it was just as economical to deal with us and get satisfactory service as to take that parts discount and get less service."

Trowell thinks an independent should have financing service available for the minority of customers who want it. In the case of Trowell and Turner, requests for financing are few, amounting to only about three per cent. But with outside financing available, the independent has a good excuse for not personally handling paper he does not want.

"Jiggs" Trowell had eight years of experience as a draftsman and two years of college, so when it came time to lay out the new establishment, he personally designed it and produced the blueprints. Then the three partners practically built the building.

"We rented a crane and had the steel up in one day," "Jiggs" recalled. "We sub-contracted masonry, plumbing, concrete and electrical work, but we did most of the other work personally. After it was finished the figures showed we built the place for \$2.90 a square foot, compared with the lowest bid we had, which was \$4.50 a square foot."

Thus Trowell and Turner Automotive saved \$9,600.00 on the new building, which is 60' by 100' for a total of 6,000 square feet.

Trouble with HEAT RISER VALVES?

Keep the manifold heat control functioning freely for top engine performance. Use PART-EASE—most effective and durable lubricant that can be used for this purpose.

Simply squirt or spray PART-EASE on the exposed ends of the valve shaft. As it penetrates, PART-EASE cuts through carbon and rust deposits that cause sticking—stalling—slow warm-ups—poor fuel economy. Leaves a long-wearing, heat resistant, non-gumming film to keep valves rust-free and in top working condition. (Also, ideal for automatic chokes.)

Make PART-EASE a PART of every tune-up and lube job. And use it for those "stuck parts" problems, too. PART-EASE "takes apart—keeps apart" stuck and rusted nuts, bolts and other parts.

PART-EASE
TAKES APART • KEEPS APART
HEAT CONTROL VALVE
LOOSENER
& LUBRICANT

PE-350

AN AGS PRODUCT

another "STANDARD OF THE INDUSTRY" from
AMERICAN GREASE STICK COMPANY
Alvaston, Michigan

CHAMPION PARTS REBUILDERS COVERS THEM ALL

**ROCHESTER
FORD
HOLLEY
STROMBERG
CARTER**

ALL passenger cars and popular trucks

...with America's first standard of rebuilt carburetor quality!

**Who - but CHAMPION can
remanufacture the full line of
the most popular carburetors -
and build into each unit 100%
uniform, quality-controlled
tailored performance for the car!**



34 Individual Quality-Control Check Points assures uniform, finest quality rebuilding from start to finish. Champion's "New Parts Added" Policy applies to every unit!



Complete "Flow-Bench Pre-Testing and Pre-Adjusting Each carburetor "run-in and tested" under simulated operating conditions . . . tailors the unit performance to the car to assure maximum operating efficiency.



"One-Stop" Coverage . . . the Industry's Most Complete Cataloging Tremendous stocks always on hand save you time, money.



Exclusive Champion Jobber Service: Carburetor and Water Pump Identification Guides help you eliminate loss of profits due to errors in exchange identification.



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4301 W. 69th Street, Chicago 29, Illinois

Write for name of nearest Champion distributor

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**THE
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IN THE USED CAR FIELD**

- Average Wholesale
- Average Retail
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- Insurance Symbols
- Easy to identify scale drawings of both domestic and imported passenger cars
- New Edition every 30 days
- Imported Car Section
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- Published in 8 Regional Editions to reflect conditions in your own market

**MAKE SURE YOUR KEY PERSONNEL
HAVE THIS
VALUABLE GUIDE ON HAND**

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**ONLY \$9 FOR
12 ISSUES PER YEAR**

QUANTITY RATES ON REQUEST

A NEW SERVICE



A NEW 15 DAY REFERENCE BOOK

WHOLESALE VALUES

The NADA 15 Day Wholesale Book is furnished to subscribers on the first and fifteenth of each month. The Edition is published for each of the 8 regions from prices determined from all wholesale sources—which in turn reflects the true trading value of the car.

**24 ISSUES FOR
ONLY \$15
PER YEAR**

**QUANTITY RATES
ON REQUEST**

NATIONAL AUTOMOBILE DEALERS

USED CAR GUIDE COMPANY

2000 K STREET, N.W., WASHINGTON 6, D. C.

Customer-Crowding

(Continued from page 40)

and a more modern appearance, here was competition at its keenest.

"But it didn't hurt us one bit," Thorpe now says. "In fact, we did increasingly more business, which shows there was enough for two stations at this intersection."

"Since we have come here," Baldschun added, "our gasoline and oil trade and sales of accessories have about tripled. And, of course, we keep busier than ever in our garage." They also note that the newer station has had three operators since it opened.

"Although much of our work is from motorists who have been with us for years," Thorpe said, "we find that, as satisfied customers, they bring in new business. Just the other day a young fellow came in and introduced himself as the son of an old customer. He wanted us to look over a car he was planning to buy. His father had done a lot of business with us, so we thought it was little enough to do for him. Besides, a little help like this may make the son our customer, too."

Time Out on Sunday

A friend revealed a similar incident. Talking to him about buying a car, Thorpe volunteered to go to the used-car lot and look it over. He took time from his Sunday at home to drive the car around, point out some of the flaws, suggest a price for which to bargain and provide other pointers that a layman needs.

Using Thorpe's tips, the friend bought the car—and where did he go to have minor work done afterwards? To Thorpe's, of course. And here he found another demonstration in how to win and keep customers.

The gasoline mileage was so low, the friend asked Thorpe to check on the causes. He naturally turned to the carburetor and overhauled it. But, when putting it back, he inadvertently failed to adjust it properly and the motorist came back with a complaint. Thorpe located the difficulty, took the blame and readjusted the carburetor.

"We're not infallible," he readily admitted, "and when we make a mistake we correct it at our own expense. It's bad enough to make a mistake on a man's car without trying to get out of taking the blame, too."

Thorpe, in his middle '30's, has been a mechanic all his life. He learned the trade from his father and worked with him in a station for

several years after serving in World War II. He picked up the basic lessons as a mechanic and station operator from his father and when a chance came to branch out on his own he snapped it up and proved equal to the task. He and Baldschun, his brother-in-law, have worked together several years now.

They do other things to endear themselves to customers and the neighborhood. For instance, a young man who was released from a reformatory had a difficult time finding a job. Thorpe hired him and he said

he became one of the best and most trusted workers he ever had employed.

Too much business success can bring problems of its own, Thorpe has found. Efforts to please customers meant extra work as the business increased and before long Thorpe's doctor was recommending a rest. But, after three weeks of enforced inactivity, Thorpe was back proving that the customer is always right, especially when it comes to picking his own mechanic. And his business record is the best proof.

NEW



SHURHIT 1000 SERIES CABINETS

provide a flexibility never before achieved
for ignition service

The No. 1000 Series is a new concept in modular Merchandising consisting of only three different cabinets and a Pedestal Base. Any cabinet can be used separately or in combination with any other cabinet in the 1000 Series. Positive interlocking units permit "on the spot" assembly in a matter of minutes.

Whether you service Passenger Cars, Foreign Cars, Trucks, Tractors, Marine, Industrial or Small Magneto Engines, Shurhit can supply you with a cabinet of your choice and a stock of quality ignition replacement parts at a small initial outlay. The cabinet combination can grow as the Dealer grows. Remember—you'll grow faster and go farther with SHURHIT IGNITION.



Shurhit PRODUCTS, INC.
Waukegan, Illinois

PRECISION AT WORK...BUILDING PROFITS!

A \$3,800 EXTRA PROFIT CAN BE YOURS ANNUALLY . . . doing just 2 jobs a day with the famous Alemite "On-the-Car" Wheel Balancer! In a little over a month, your new balancer pays for itself — completely. What's more, balancing service uncovers related TBA sales that give your profits an additional boost. Even with the barest minimum of 3 jobs *per*

week, a clear profit of well over \$800 is yours annually. And you save money, too! The Alemite Wheel Balancer is complete! No extra attachment to buy —and it never becomes obsolete!

Compare Alemite with all others...see how you can be dollars ahead in profits . . . with equipment from the leader in Automotive Service Equipment!

MOVES ANYWHERE—WORKS ANYWHERE! Alemite "On-the-Car" Wheel Balancer is easily operated, self-contained, precision built. Exclusive hand strobe light and pickup gives accurate meter reading indoors or outdoors—proves to your customer the need for a balancing job—shows him the perfect results when the job is completed. Gives *both* up-and-down and side-to-side correction!





ROLLING TOWARD \$3,102 OF EXTRA PROFIT!

That's a year's profit doing only *one* aligning job a day. The Alemite Cross-Sight Wheel Aligner needs no space-robbing, costly pit or ramp installation. Works wherever the car is—inside or out—whether on a level surface or not.



SPECIALIZED LUBRICATION JOBS PAY OFF!

Alemite Specialized Hand Guns help you get the *right* lubricant in the *right* spot. You do a *better* job, your customers are more satisfied, you save time on wheel bearing jobs, steering gear, other specialized points!



ALEMITE
DIVISION
STEWART-WARNER
CORPORATION

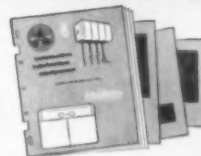
Dept. DH-61, 1850 Diversey Parkway, Chicago 14, Illinois

In Canada: Stewart-Warner Corporation of Canada, Ltd.
Belleville, Ontario

CASH IN ON FAST LUBE SERVICE! If your lube bay is just an ordinary low-profit area, turn it into a gold mine with Alemite Strato-Line Lubrication Equipment. You save time and labor costs... get faster turnover... because no other pumps give you such instant power—with no time lag—every time the gun hits the fitting.



Send for a free, fact-filled booklet telling the whole, big-profit story of Alemite Equipment. Indicate which specific products you are most interested in.



WHEEL BALANCER ☐ Automotive Lifts ☐ Strato-Line Lubrication Equipment ☐ Wheel Aligner ☐

Name _____

Address _____

City _____ Zone _____ State _____

22% of Retail Sales Are Automotive

TWENTY-TWO per cent of all retail sales in the U.S. are automotive, the Automobile Manufacturers Association reported last month.

This is one of the many motor vehicle and highway transportation items of information contained in the 1961 version of *Automobile Facts and Figures*, statistical factbook just published by the AMA.

In a special center section, the

booklet lists automotive retail sales at more than \$45 billion for a single year. Total automotive retail, wholesale and connected service business receipts exceed \$93.5 billion, or 18% of all such business activity in the country.

The statistics are taken from the latest U.S. Census of Business survey.

They show that one business in six

is automotive and that 10,500,000 persons are employed in highway transportation industries.

The publication also shows that the trend toward motor vehicle ownership and travel continued to grow at a rapid rate in the U.S. in 1960, topping most of the old records.

For the first time in history, more than 75% of the nation's families now own at least one automobile. In fact, 13.4% own more than one car.

Motor vehicle registrations reached a new high of 73,897,000. Of this number, 61,569,000 were passenger cars and 12,328,000 were trucks and buses. This huge fleet traveled a record 720 billion miles on the nation's streets and highways.

Second only to 1955, factory sales of motor vehicles in 1960 totaled 7,869,271 units. This includes sales of 6,674,796 cars and 1,194,475 trucks and buses with a combined wholesale value of \$14,461,150,000.

Another first was chalked up by the industry in the sale of more than a million station wagons, a seven-fold increase over 1950.

Among other highlights in the more than 70 pages of charts and figures pertaining to the automotive industry and highway transportation are:

Special motor vehicle tax collections reached an all-time high of \$10.6 billion in 1960, including federal excise taxes of \$4.5 billion. Special truck taxes equalled \$3 billion.

Automotive service establishments' receipts increased 73% from 1954 to 1958. The number of establishments climbed in that period from 94,342 to 125,691 and receipts jumped from \$2.2 billion to \$3.8 billion. The number of employees went up from 256,280 to 389,553.

Taxes take 26 cents of every dollar included in the delivered price of a new car.

Of the motor cars now in use, 57% are equipped with automatic transmissions, 22% with power steering and 20% with power brakes.

Fifty-four per cent of U.S. passenger cars are five or more years old. The average truck in use is 7.6 years old.

Forty-one per cent of passenger-car sales were four-door sedans.

Replacement parts sales in 1960 were \$2,375,000,000.

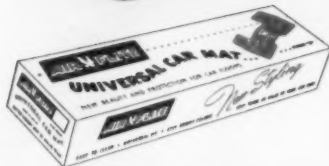
Automobile credit extended last year totaled \$18 billion.

Multi-car households have increased 68% in the last six years.

NEW - for high-soaring profits!

AIR FLITE

A popular priced "Universal"
Door-to-Door Car Mat
by **MONKEY GRIP**



SEVEN BEAUTIFUL COLORS
Individually packed in strong
corrugated boxes, printed for
attractive display.

**Modern Styling . . . Harmonizing
Colors . . . New Live Rubber**

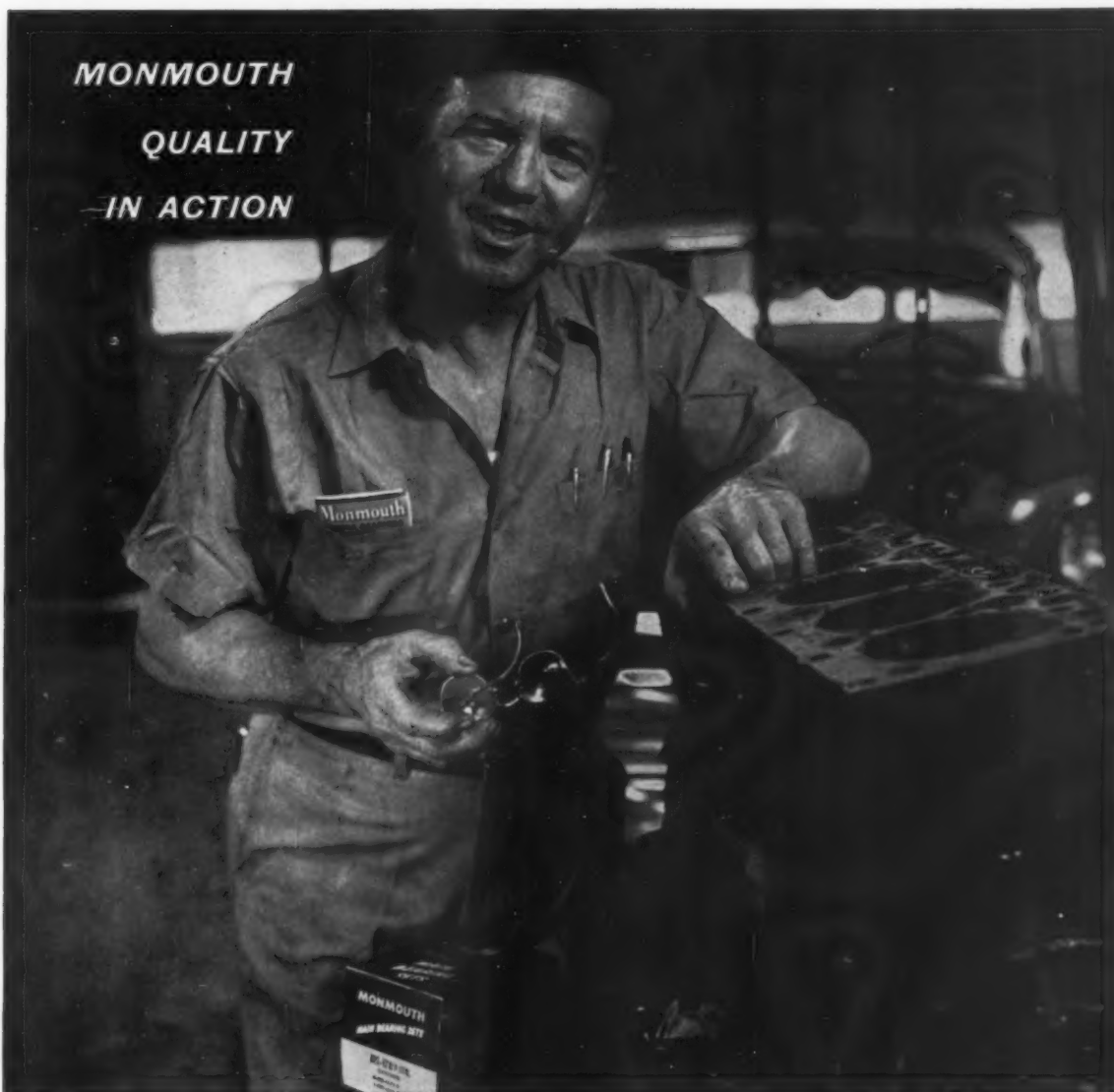
QUALITY . . . STYLE . . . ECONOMY PRICED!
Everything to boost your car mat sales to
new heights! Rich and appealing in full
molded design — colors that sparkle and
stay new looking — engineered to fit the
most popular cars on the road. All this in
the "economy" price field! Every dealer
needs "AIR-FLITE" Car Mats to attract
more customers — make higher profits.

**Cover the big, profitable Car Mat Market
with the complete Monkey Grip Line**

Write for complete, new
catalog of Monkey Grip
Car Mats!

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**MONMOUTH
QUALITY
IN ACTION**



"I've used Monmouth Bearings for 15 years..."

... and you can benefit from my experience. I've seen a lot of changes in cars since I repaired my first Model T. Today's engines need high quality bearings, designed especially for modern driving. Believe me, you won't find a better line of bearings than Monmouth."

If you want performance that pays off, use Monmouth bearings in all your engine rebuilds. For instant service, call on your NAPA jobber. He can give you complete Monmouth service on all your engine bearing requirements.

reports J. P. Lamb
Lamb's Garage
Meridian, Mississippi

MONMOUTH Engine Bearings

CLEVITE SERVICE: Cleveland Graphite Bronze • Division of Clevite Corporation • Cleveland 3, Ohio



**Newest Tractor "Pink List"
of Replacement
Gaskets and Oil Seals**

**This List and Available Stock
Now at your Victor Jobber's**



Parts you'll need for tractor servicing

Use this Victor catalog for fast, accurate ordering. Covers "99%" of your sealing parts needs. Gasket listings include full and head sets; valve, manifold and oil pan sets; plus other individual parts. Oil seal numbers given for each application. All tractor models and applications completely identified. You'll save a lot of job time and trouble by using this catalog—and you'll be sure all sealing parts are right and dependable. Get your free copy from your Victor Jobber.

Victor Mfg. & Gasket Co., P.O. Box 1333, Chicago 90, Ill. Canadian Plant: St. Thomas, Ontario.

**COVERS THE POPULAR MODELS
OF ALL THESE MAKES:**

ALLIGATOR	FERGUSON
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DEERE	WISCONSIN MOTORS
EARTHMASTER	

VICTOR

Sealing Products Exclusively

GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line—for Cars, Trucks, Tractors, Stationary Engines

Dear Bill,

Our summer business is good this year again, with customers coming in for a variety of products and services that we literally have to go out and drag in during other seasons of the year. Seems that transportation during the winter is considered a necessary evil, whereas summer travel comes more under the heading of pleasure.

After attending a couple safety meetings where they ran off some movies of automotive collisions set up for safety studies, our boys have been on a safety belt kick that has brought us in a nice bit of accessory and labor profit, while doing the driving public a good turn.

The engineers crashed several cars together at a speed of only 30 mph for the study, and the several cameras rigged in each vehicle to show the antics of the man-sized dummies during the few seconds the cars were careening about and rolling over were enough to convince anyone the safety belt is the thing. It was estimated that half the fatal injuries incurred in such collisions might be avoided if the individual was anchored to his seat instead of bouncing around bumping his head on metal and glass components, or flying out the open door.

Some mechanics ease up on their battery inspections during the warm months and there is no better way of compounding ill-will and losing sales. Electrical troubles are still the top cause of service calls, and you can bet that 90% of the drivers making the call for service are going to blame someone besides themselves for the failure that left them sitting at the roadside.

A battery near the end of its service life can usually kick the starter over for a summer start where it would poop out if the engine was cold. Therefore, many cars are only a few starts away from a dead battery when they drive into the shop for some other less critical service. If they drive out again without the battery getting a test, the failure will certainly occur at some distant point away from the shop. Since there is a possibility that we may not be the one to get the service call and sell a new battery, we catch as many of them as we can when they are in the shop by making a voltage check.

With our mind on the subject, we often find other electrical troubles like shot battery cables, loose connections, burned-out light bulbs and generators not charging which might otherwise be overlooked. After they took the battery out from under the



TO HELP YOU SELL MORE MAC'S IN 1961



"I don't care if your insides do feel rusted out, Mac's No. 13 is for cars—not for people. Now give it back."*

*Mac's No. 13 is a marvelous rust inhibitor for car radiators. It keeps a car's cooling system running clear for a whole year. You can buy Mac's No. 13 at just about any service station.



A whole series of sales-making ads like this one will be telling the story of Mac's famous radiator products (MAC'S NO. 13, SEALER & STOP LEAK, COOLING SYSTEM CLEANSER) month after month in:

**TRUE • PLAYBOY • FIELD & STREAM •
SPORTS AFIELD • OUTDOOR LIFE •
MOTOR TREND • POPULAR MECHANICS •
POPULAR SCIENCE . . .** men's magazines that

reach your best customers regularly. Watch for them!

seat or floor and put it under the hood it has got better attention from the service station men, but their check seldom goes beyond adding water, so we feel a closer check by a specialist will pay off as well as it did then, and believe me it does.

Yrs,
Ed.

Success by Three Steps (Continued from page 49)

hard core of regular customers as we do."

Taylor is a strong advocate of individual testing units which can be moved about more easily and which can be taken on road calls. His shop has the equipment to make any type of compression check, and can make a complete electrical check in minutes. The shop is equipped to repair or replace—"we always try to repair, it's better for the customer."

The garage maintains an ample stock of generators, starters, carburetors and voltage regulators, and rebuilds a large number of units.

With Taylor as owner-operator-

service manager, the shop usually operates with three mechanics. One man is an ignition specialist, one handles brake and tune-up jobs and the third does general repairs on motor vehicles.

Taylor customers are encouraged to look on while a preliminary check is made to determine what repairs will be necessary.

"Usually we can tell very quickly what the trouble is and what it will cost," the Alabamian said. "In that way we don't have to surprise the customer with a much larger cost figure than he anticipated. However, if a more thorough examination indicates additional repair work is needed, we phone the customer immediately and carefully explain both the service or parts needed and the charge.

"When a new customer returns for his car, we frequently have the worn-out parts laid out for him to see.

"Also, we suggest a post-repair road-test to see that the car is functioning properly to our satisfaction and the customer's."

Despite its relatively small size the garage provides courtesy pickups and deliveries. Few cars are tied up more than three or four hours and the shop provides one-day service on any job.

"Building customer confidence may be an overworked term," Taylor said, "but it's the foundation of an independent garage's business. A majority of our trade is with people who've been coming to us many years. They know they'll get efficient work at reasonable cost."

Small details get careful attention at this shop. Mechanics are cautioned always to use clean fender covers and to avoid soiling upholstery.

The attractive, well-lighted shop can accommodate up to eight cars without crowding and provides modern bath facilities for mechanics.

Taylor does a modest amount of newspaper advertising stressing ignition work, tune-ups and brake repair. He does not accept overhaul jobs and doesn't solicit foreign-car repairs, although such work is accepted.

Fort Pierce Picks Ivey

B. F. "Jack" Ivey of Jack Ivey Motors (Studebaker) has been elected president of the Fort Pierce (Fla.) Automobile Dealers Association. Other officers are James H. Pore of Pore's Inc. (Buick), vice president, and Ed Bailey of General Finance Corp., who is secretary-treasurer.

how to turn thin air...



into fat profits!

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After a country-wide survey, the P. Sorensen Mfg. Company, now in its 61st year, decided to locate in Kentucky and "Grow with the South."

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PI-565





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*at your Chevrolet
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When you want Chevrolet parts PDQ, the man to call is your Chevrolet dealer's parts manager. (PDQ means parts delivered QUICK—*genuine Chevrolet parts* made to fit and perform to Chevrolet's quality standards.) If you want even speedier action, there's just one thing left to do: *stock 'em*. Your Chevrolet dealer's the man to see for that, too. He will help you select a basic inventory of high-turnover parts so you can give *immediate service* to a good percentage of your Chevrolet customers.

With more Chevrolets on the road than any other make, it will pay you to make your Chevrolet dealer your partner in quick-action, quality service. That's a sure way to keep your customers satisfied....Chevrolet Division of General Motors, Detroit 2, Mich.



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make your Chevrolet dealer your partner in service!*



*Replace convertible
tops in 1/4 the time!*

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You can save up to 4 hours on a job such as this with a powerful, compact MILWAUKEE Screw Driver/Nut Runner. You remove and replace 1½" or even 3" valence rail bolts in a matter of minutes . . . eliminate tedious, tiresome, hand operations. Even more important you handle *more jobs more profitably*.

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— easily adjusts for driving screws and bolts
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Frost of Virginia Marks 40 Years with Firestone

CELEBRATING 40 years as a Firestone tire dealer, Tom Frost, Warrenton, Va., Ford and Mercury dealer, was recently presented a pin and check by Ray Firestone, president of Firestone Tire and Rubber Co.

A native of Marshall, Va., Frost started in business March 11, 1921, with the Warrenton Supply Co., Ford and Firestone tire dealership. While there, he organized an automobile racing team which raced in county fairs. In 1936, he resigned as vice president of the Warrenton firm and organized his own Firestone dealership and service station business, later taking on the Oldsmobile franchise and then Dodge and Plymouth for Fauquier County.

During World War II, Frost erected four storage buildings and stored 1,400 new automobiles. He



worked with OPA and WPB in making plans for preparing and delivering cars from storage, and sold cars in most states and several foreign countries.

Upon Warrenton Supply Co.'s resignation as Ford dealer in 1945, Frost was appointed Ford and Mercury dealer. He opened Firestone Home & Auto Supply Store in 1946.

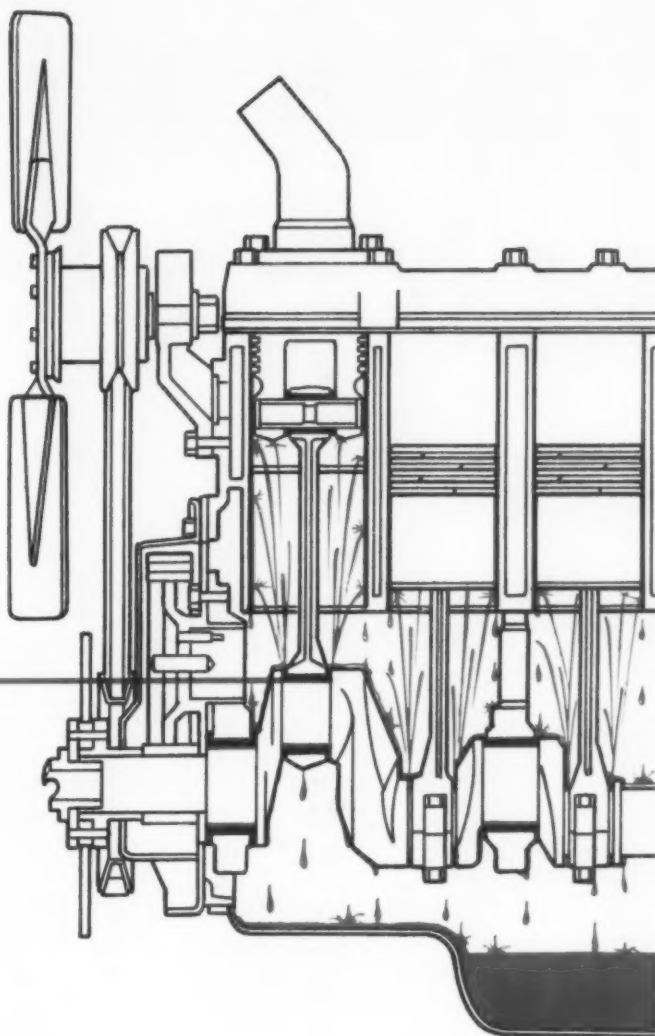
During 1952 and '53 he was a member of the Ford Dealer Council in Detroit.

Frost has been associated with automobile racing since 1924, and since 1948 has been referee and steward for Mobil Gas Economy Run.

A past president of the Virginia Council of Automobile Old Timers, Frost is also a member of the United States Auto Club, Automotive Trade Association of Virginia and the National Automobile Dealers Association.

Persons attending Frost's three-day celebration were presented a boxed, blooming azalea.

Why precision bearings are vital here



Engine bearings have *two* vital jobs. They provide a low-friction surface for journals to ride on. But equally important, they control the oil throw-off, due to the spinning action of the shaft, that lubricates and cools cylinder walls and other engine parts.

Exact tolerances are needed in engine bearings and shaft diameters to get the kind of precise "clearances" needed to control oil throw-off. *Too little clearance*—an error of less than .001"—may result in an overheated bearing and early bearing failure due to insufficient lubrication.

Too much oil clearance is equally harmful to proper engine performance. If oil clearance is changed from

just .0015" to .006", the oil throw-off (shown above) increases 25 times. And even the best piston rings can control only about a 5 times normal amount of oil. The excess oil then slips past piston rings into the combustion chamber where it clogs piston rings and builds up combustion chamber deposits.

Federal-Mogul knows, as you probably do, the importance of oil clearances. That's why **Fm** bearings are manufactured to tolerances as close as $\pm .000125"$ —1/16 the thickness of a human hair. Why take a chance on anything less than precision engine bearings? You can be sure of a satisfied customer when you use the best. See your Federal-Mogul jobber.



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FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN

HELPFUL BOOKLETS FREE!

On this and the following pages is an excellent selection of free Automotive literature. List numbers of those desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

102 MODEL NUMBER INTERCHANGE— Handy reference sheet with complete listing of all passenger cars 1946 through 1960 by model number interchangeably with model name. Saves look-up time by including car model data not found elsewhere. Useful as a supplement to every automotive parts catalog. Kem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn, N. J.

103 SAMPLES, BOOKLETS, AND CATALOG SHEETS—describing the DL Handi-Cleaner available on request. DL Products, Inc., Banite Bldg., Buffalo, N. Y.

105 WAGNER AIR BRAKE AND ROTARY AIR COMPRESSOR BULLETIN—Discusses in detail straight air and air-over-hydraulic air braking systems. Contains an explanation of the operation of the Wagner Rotary Air Compressor complete with diagrams, cross section drawings, and photographs. Lists by catalog numbers component parts as well as field installation kits. Write for Catalog KU-201. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

109 AMMCO BRAKE SERVICE, ENGINE REPAIR, AND HONING TOOLS AND EQUIPMENT— Catalogs, describing the Ammco line of brake drum lathes, brake shoe grinders, brake drum micrometers, brake shoe setting gauge, brake hones, brake bleeders, brake safety checking instruments, pin fitting honing machines, small bore hones, cylinder hones, cylinder surfacing hones, ridge reamers and torque wrenches. Ammco Tools, Inc., 2110 Commonwealth Ave., North Chicago, Ill.

110 HEAVY DUTY AUTOMOTIVE AIR TOOLS—Complete details including prices on heavy duty air Impacttools and accessories, tire service tools and IMPA Cutter. Proof of time, labor, and money savings on many automotive service jobs. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

112 SOUND SLIDE FILM—Entitled "Automotive Wheel Bearings" is the first in a series of audio-visual aids designed to provide bearing salesmen, servicemen and replacement parts men with practical and useful information on various applications for ball, roller and engine bearings and on oil seals. Federal-Mogul Service, 11031 Shoemaker Ave., Detroit 13, Mich.

116 REMANUFACTURED ENGINE BROCHURE—New 6 page folder helps sell vehicle owners on the many advantages of remanufactured engines. The back provides space for the installer, the jobber, or the rebuilder to imprint his name. It provides an excellent sales aid piece for engine rebuilder and their jobbers to supply to service outlets installing engines. Muskegon Piston Ring Co., Muskegon, Mich.

118 BRAKE SERVICE GUIDE—Complete instructions for inspecting, flushing and bleeding the brake system. Handy trouble check chart. Write for Bulletin HU 411. Wagner Electric Corp., 6362 Plymouth Ave., St. Louis 33, Mo.

123 AERO-SEAL HOSE CLAMPS—An illustrated 4-page folder giving clamp ranges, mechanical information, engineering data, stock numbers, packaging, etc. Breeze Corps, Inc., 700 Liberty Ave., Union, N.J.

132 AUTOMOTIVE SERVICE GUIDE—A practical and factual presentation of the use of Impacttools in automotive servicing. Contains time study reports showing how dealers and shops can increase profits for both themselves and their mechanics. Automotive Service Guides are now available for Ford, Chevrolet, Plymouth, Oldsmobile, Hudson, Studebaker and general truck service. Specify which Guides you want. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N.J.

133 CATALOG NO. 56—Features more than 300 Champ-Items automotive replacement parts for all makes of cars. A handy service book. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

134 MOOG RINGLINER—Illustrated piston ring catalog carries listings and product information on complete line of Moog cast iron, partial chrome and Chrome Plus lines. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

138 PLUG CHECK—A colorful wall banner showing condition of spark plugs under various driving conditions. This service tool is designed to assist service men in diagnosing spark plug heat range problems. The Electric Autolite Co., Toledo 1, Ohio.

141 MOOG STREAMLINER CATALOG—Carries exploded views, detail illustrations and listings of leaf spring, main leaves, spring parts, shackles, shock links, tie rod ends, drag links, king bolts, coil springs and other coil action parts for cars and trucks. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

142 1958 MUFFLER CATALOG SUPPLEMENT—Lists high efficiency mufflers and dual exhaust equipment for each model of 1958 cars. Grand Automotive Products, 2055 N. Ruby St., Melrose Park, Ill.

143 TRUCK SERVICE GUIDE—32-page bulletin gives the truck service shop accurate time and cost comparisons in doing a number of common service jobs by hand and with air and electric power tools called Impacttools. With this guide, a truck service shop can evaluate more accurately its present service equipment and determine in ad-

vance the actual savings that it may expect through using Ingersoll-Rand air and electric Impacttools. Ingersoll-Rand Co., 11 Broadway, New York, N.Y.

146 HAND CRIMPING TOOL—Descriptive circular. Strips and also crimps Rajah terminals to ignition cable. The Rajah Co., 35 Verona Ave., Newark, N.J.

148 HANDY WALL CHART—Pictures and describes the proper way to lift all 1958 cars with a one-end bumper lift jack. Blackhawk Mfg. Co., Dept. SAJ-25, Milwaukee 46, Wis.

150 TRANSMISSION JACK CATALOG—covering the complete line of automotive and truck hydraulic transmission jacks. Blackhawk Mfg. Co., Dept. SAJ-T1, Milwaukee 46, Wis.

151 SERVICE JACK CATALOG—Describing complete line of service jacks from 1½ through 20 tons. Blackhawk Mfg. Co., Dept. SAJ-S1, Milwaukee 46, Wis.

153 ONE-END LIFTS—Complete information on mechanical, hydraulic and air operated one-end lifts. Blackhawk Mfg. Co., Dept. SAJ-L1, Milwaukee 46, Wis.

155 MAKE MORE SALES ALL OVER THE LOT—Attractive 2-color folder shows how to increase gas, oil and TBA sales and turn new customers into steadies. Pullman Vacuum Cleaner Corp., Dept. P, 25 Buick St., Boston 15, Mass.

157 "PULL DOZER" CATALOG—Hydraulic and mechanical body tool catalog describing the new revolutionary method of pulling out body damage from exact point of impact. Blackhawk Mfg. Co., Dept. SAJ-pd., Milwaukee, Wis.

160 SUGGESTED SHOP PRICES ON MACHINE SHOP OPERATIONS—A 24-page booklet giving suggested shop prices on everything from align bore blocks to valve jobs. Prices represent average price gathered from jobbers in U.S. and Canada. Van Norman Automotive Equipment Co., 3640 Main St., Springfield 7, Mass.

164 AIRTEX FUEL PUMPS—New and rebuilt fuel pumps. Catalog AX-70. Airtex Automotive Div., Inc., Fairfield, Ill.

169 YOUR ANSWER TO VAPOR LOCK—New technical bulletin deals with vapor lock and hot-motor re-starts and explains how Flit-O-Reg helps prevent these conditions and increase engine efficiency. Alondra Sales, Inc., 959 Crenshaw Blvd., Los Angeles 19, Calif.

172 A-1919 FUEL PUMP SHOP MANUAL—Contains the operation, testing, repair, installation and removal of fuel and vacuum pumps. D. Dwyer, AC Spark Plug Div., Flint 2, Mich.

173 HYDRAULIC PARTS—Complete master catalog of the complete line of Els hydraulic parts. Lists and illustrates the complete line of repair kits, hoses, stop-light switches, brake-master and wheel assemblies. Information complete up to 1961. Els Automotive Corp., Middletown, Conn.

175 A-1920 SPARK PLUG SHOP MANUAL—Contains inspection, cleaning and installation procedures as well as spark plug heat range system. D. Dwyer, AC Spark Plug Division, Flint 2, Mich.

179 A-2446 CHART—(In full color) Illustrating "What Your Spark Plugs Can Tell You About Your Engine."—D. Dwyer, AC Spark Plug Div., Flint 2, Mich.

INFORMATION CENTER



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Instead of writing a dozen different manufacturers for free literature and more information on parts, equipment, accessories or services, just insert the appropriate key numbers of the New Product or Booklet listings in which you are interested. For more information on advertisements, just indicate the page number on which it appears.

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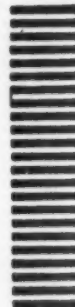
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182 DIESEL SHOP MANUAL—76 pages, includes 275 illustrations, 56 engine reference tables and 26 parts lists. Bacharach Industrial Instrument Co., 200 N. Brad-dock Ave., Pittsburgh, Pa.

183 BADGE-O-RAMA PROFIT KIT—83 piece profit kit of eye-catching badges, a different one for each week of the year given free with Pullman Vacuum. Pinned to attendant's shirt these silent salesmen promote seasonal TBA items at customer's eye level. For sample badge and full information write Pullman Vacuum Cleaner Corp., 25 Buick St., Boston, Mass., Dept. SAJ.

185 PRESCRIPTION FOR BETTER EN-GINE OVERHAULS—16 page booklet contains information on how to diagnose a case of excessive oil consumption and how to make the necessary corrections. Perfect Circle Corp., Hagerstown, Ind.

186 FILTER CATALOG—Offers details on complete lines of oil, air, fuel and cooling system filters. Lee Filter Corp., Talmadge Rd., Edison, N.J.

190 COOLING SYSTEM CLEANING—Bulletin titled "Cooling System Main-tenance an Open Door to Greater Profits." describes Jenny Steam Thoro-Purge the most modern and thorough method of re-verse flushing cooling systems; also shows increased profits possible from its use. Write for Bulletin STP-5, Homestead Valve Manu-facturing Co., P.O. Box 99, Corapolis, Pa.

193 WIRE & CABLE CATALOG—A con-densed catalog of electric wire and cable, complete with specifications for all passenger cars. The Electric Autolite Co., Toledo 1, Ohio.

206 THE SERVICE STORY ON SHOCK ABSORBERS—Handbook points out that one of every four cars on the road is in need of some kind of shock absorber service. It illustrates proper servicing pro-cedures, including importance of periodic inspection of shock absorbers on air sus-pension cars. It is designed to simplify shock absorber installations. United Motors Service Div., 3044 W. Grand Blvd., Detroit 2, Mich.

207 1957 BRAKE SHOE CATALOG—With illustrations of brake shoes and their proper application, etc.—National Brake Block Corp., 37-17 57th St., Woodside 77, N.Y.

209 EXTRA PROFITS WITH STEAM CLEANERS—20-page booklet showing several models of Hypressure Jenny steam cleaners, and illustrating many profit-able usages of equipment in automotive and allied industries. Also folder on Cooling System Maintenance. Hypressure Jenny Div., Homestead Valve Mfg. Co., P.O. Box 348, Corapolis, Pa.

211 SERVICE TOOL CATALOG—Illus-trates and describes more than 70 tools designed to solve specific problems for the repairman. Each helps to speed up jobs, make operations easier, cut shop costs. Hastings Mfg. Co., Hastings, Mich.

214 THE WHYS AND HOWS OF VOLT-AGE REGULATORS—Explains in simple language, every detail of Voltage

Regulators—how they work, why they are important, how to adjust and service them. In 16-page handy pocket size edition, with many working drawings to clarify and illus-trate the text. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N.Y.

215 LAHER CATALOG PAGE—Both sides feature passenger car overloads and booster springs. Includes specifications and price. Laher Spring & Tire Corp., 300 Madi-son Ave., Memphis, Tenn.

220 1955 LASCO BRAKE SHOE APPLI-CATION CATALOG—Complete listing of brake shoe number, F.M.S.I. number, year, make and model of automobile. Avail-able upon request. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

221 NEW REPAIR KIT FOLDER—Gives information on Jack-Pack automatic transmission sealing line (overhaul kits, gasket sets, lip seal sets, rubber sets, sealing rings); Noz-L-Pack automatic nozzles repair kits for Buckeye and OPW nozzles and complete line of Jack-Pack jack repair kits and jack oil. For free copy write: Jack-Pack Mfg. Co., 2115 N. Marianna Ave., Los Angeles 32, Calif.

222 "WHAT PRICE QUALITY"—Read how ignition parts should be made and why. "WHAT PRICE QUALITY" tells the story of the making of quality ignition parts. Written in non-technical language. Standard Motor Products, Inc., 37-18 North-ern Blvd., Long Island City 1, N.Y.

225 THE "CAMEL COOLIE" VENTI-LATED SPRING CUSHION—Four color catalog page is now available. This newest product is hailed by the industry as a welcome addition to the Camel line. H. B. Egan Mfg. Co., Muskogee, Okla.

226 OIL LEAK DETECTOR—Bulletin shows how hooking up the bearing oil leak detector reveals internal engine conditions, uncovers main, rod or cam bear-ing wear, plugged oilways, starved bearings, before tearing down the engine. Also de-scribes how the detector checks the com-pleted overhaul and pre-lubricates moving parts before turning over the engine. Il-lustrates two sizes with maintained oil pres-sure—one for cars, one for larger truck engines. Federal-Mogul Service, 11031 Shoe-maker, Detroit 13, Mich.

228 ENVELOPE STUFFER—Describes in detail the starting fluid, fire extin-guisher, spot remover and penetrating oil now available from Spray Products Corp., P.O. Box 584, Camden 1, N.J.

235 METHODS OF TUBELESS TIRE RE-PAIRING—An authoritative brochure with illustrated steps on the permanent re-pair of tubeless tires, using either the hot or cold vulcanizing methods is available from H. B. Egan Mfg. Co., P.O. Box 1406, Muskogee, Okla.

242 AUTOMOTIVE LINES—4-page book-let lists all of the Solder Seal chemi-cal tools, giving part numbers, size, case contents, list and dealer prices. Radiator Specialty Co., 1400 W. Independence Blvd., Charlotte 8, N.C.

243 HOW TO SELL MORE OIL, OIL FILTERS, LUBRICATIONS & TBA ITEMS—12-page illustrated booklet gives profitable tips on increasing your sales and making every customer a happy customer. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

244 SPARK PLUG INSPECTION CHART—Form No. M-1433—A full color chart that can be tacked or taped up onto walls showing both normal and abnormal ap-pearance of spark plugs plus tips on how to get top performance from spark plugs. The Electric Autolite Co., Toledo, Ohio.

255 TOOL CATALOG "X"—128 pages gives pictures, descriptions and spec-ifications of the complete line of Snap-On Tools and shop equipment, including the latest electrical and electronic engine test-ing instruments, wheel aligning and balanc-ing equipment, etc. Snap-On Tools Corp., Kenosha, Wis.

264 TIRE VALVES, EQUIPMENT AND TOOLS—Complete jobber catalog de-scribes the entire line; giving numbers, de-scription, packaging and weight of each item. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N.J.

265 TIRE VALVE WALL CHART—Com-parison chart shows application of tubeless tire valves by car name. Also shows the interchange stock numbers of other manufacturers. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N.J.

266 NEW COMPRESSOR CATALOG—16 pages includes specifications on two stage and single stage compressors plus specifications on compressor pump and Hi-Pressure Washers. Catalog has several pages on accessory items and a section devoted to helping you choose the correct compressor for you. Champion Pneumatic Machinery Co., 825 N. Pleasant St., Princeton, Ill.

268 HI-PRESSURE WASHERS—4-page brochure gives specifications, de-scription and uses of the washers offered by Champion Pneumatic Machinery Co., 825 N. Pleasant St., Princeton, Ill.

270 1960 TUBELESS TIRE VALVE WALL CHART—Measuring 19" x 25", the free chart lists 67 models of 18 major American cars, with their corresponding wheel size; tire size; manufacturers' rec-ommended tire pressures, both front and rear; plus complete recommended valve in-formation both for 1960 models as well as earlier model cars. It also gives compar-able information for 28 models of 12 popu-lar foreign make cars. The Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

271 AUTOMOTIVE CHEMICALS—8 page catalog gives description of each item in the Permatex line giving uses, parts num-bers and sizes. Permatex Co., Inc., 300 Broadway, Huntington Station, New York, N.Y.

273 "HOW TO EARN BIG PROFITS IN BRAKE SERVICE"—Booklet tells how to spot and sell brake service prospects. Shows how a small investment in brake equipment will yield annual return of over 287%. Includes a check list of equipment and accessories necessary for a profitable shop. Amoco Tools, Inc., 2100 Common-wealth Ave., North Chicago, Ill.

275 PISTON RING—16-page booklet con-tains a description of the Modern Power features of Ramco Piston Rings com-plete with illustrations. Ramsey Corp., P.O. Box 513, St. Louis 66, Mo.

283 CARBURETOR WALL CHART—Three color 17" x 22" trouble shooter chart locates the sources of seven common types of carburetor trouble and gives specific causes and remedies. Hygrade Products Div., Standard Motor Products, Inc., 37-18 North-ern Blvd., Long Island City 1, N.Y.

285 "INSTALL RATHER THAN OVER-HAUL"—A booklet designed to show dealers, independent repair shops and in-stalling shops the many benefits resulting from the installation of rebuilt engines. Write Muskegon Piston Ring Co., Muskegon, Mich.

288 LOTION-TYPE SKIN CLEANER—Illustrated brochure gives you six pages of instructions on how you can cut hand-cleaning time and help prevent der-matitis. Gojer, Inc., Box 991, Akron, Ohio.

HELPFUL BOOKLETS FREE!

289 CREME HAND CLEANER—8 page booklet contains illustrated information on how you can save 75% on clean-up costs and safeguard employees against dermatitis and other painful skin irritations. Includes listing of other cleaning preparations, money-saving dispensers, and convenient brackets. Gojer, Inc., Box 991, Akron, Ohio.

297 SCREW DRIVER CATALOG NO. SD 56—Colorful catalog showing over 400 different sizes and styles of hand tools. Screw Drivers, Nut Drivers, Pliers and Wood Chisels, are presented in clear pictures and tables showing complete dimensions. Merchandising Displays, helpful Screw Charts and standardization tables are also shown. Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.

298 SOLDERLESS TERMINAL CATALOG NO. T 70—Over 60 different sizes and styles of Solderless Terminals are illustrated in a beautiful 4 color catalog. Actual size illustrations plus blue print type of drawings, with all dimensions clearly marked, make for easy selection of the proper Terminal, for every need. Regular, Quick Connect and the new Insulated type of Solderless Terminals are shown. A Quick Reference Card with actual samples mounted, is also available. Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.

299 SELLING RING JOBS—3 page folder entitled "The Sealed Power 4-Way Check Plan" shows you the essential points necessary for successful ring jobs. Will greatly assist you in doing a better selling job with customers. Sealed Power Corp., 500 Sanford Ave., Muskegon, Mich.

300 VALVE CATALOG—No. 59 gives 29 pages of alphabetical valve listings, and also includes interchange list and numerical list. Manley Valve Corp., 1523 Fairmount Ave., Philadelphia 30, Pa.

305 DUAL-PURPOSE TIRE REPAIR PATCHES—Illustrated catalog describing new Self-Vulcanizing Dual-Purpose Patches. Metal dispenser cabinet for shop use—patches packed in handy dispenser cartons. Monkey Grip Sales Co., P.O. Box 6170, Dallas 22, Texas.

306 NEW FRICTION TAPE DISPLAY—Illustrated catalog covering entire line of Monkey Grip Friction Tape and Plastic Electrical Tape, features new merchandising rack for carded Friction Tape. Also, counter display containers for boxed tape. Monkey Grip Sales Co., P.O. Box 6170, Dallas 22, Texas.

307 TIRE REPAIR MATERIALS, AUTO RUBBER PRODUCTS—New complete 24 page catalog covering Monkey Grip Products for the Automotive Trade. Colorful, illustrated and informative. Monkey Grip Sales Co., P.O. Box 6170, Dallas 22, Texas.

308 TUBELESS TIRE REPAIR PLUGS—Molded rubber plugs for on-the-wheel puncture repairs in Tubeless Tires are described in new catalog. Plugs are available in complete shop assortment kit, consumer kit, and packages according to size. Monkey Grip Sales Co., P.O. Box 6170, Dallas 22, Texas.

309 ACILLOSCOPE AND TUNE UP MANUAL—A new manual explaining operation of AC's new ACiloscope spark plug tester and giving instructions for easy and accurate engine tune-up work. The 44-

page manual contains more than 100 illustrations and is divided into five sections for easy reference. Advertising Dept., AC Spark Plug Div., 1300 N. Dort Highway, Flint 2, Mich.

311 TUNE UP SPECS—8-page booklet containing latest 1959 ignition tune up specifications for trucks, small engines and tractors is being offered free by Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N.Y.

314 WAGNER BRAKE PARTS CATALOG—A handy ONE-POINT reference to fast-moving brake parts and lining, covering popular models of cars and trucks. Catalog also lists complete stock of shoe exchange sets, as well as CoMaX bonded lining segments available to those interested in bonding lining in their own shops. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

319 BRAKE AND SHOCK CATALOG—20 page catalog and price list of Girling brakes and shock absorbers for imported cars. Covers popular models from 1948-1959. Includes brake and clutch supply tanks, lined brake shoes, brake parts, service kits, disc brakes and shock absorbers. Lucas Electrical Services, Inc., 501 W. 42nd St., New York 36, N.Y.

320 NEW DEALER CATALOG OF MOTOR REBUILDING EQUIPMENT—Features the complete Storm-Vulcan jobber line of engine rebuilding machines. Attractively printed in two colors, punched and slotted for inclusion in jobber salesman's catalogs. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas.

323 BRAKE LINING—A new 18-page condensed catalog listing brake lining recommendations for all popular passenger cars, commercial cars, etc. Vehicles are listed by year and model. Recommendations are made both for riveted and for bonded lining. World Bestos Corp., New Castle, Ind., Attn.: Sales Promotion Mgr.

334 TIRE VALVES, PARTS & ACCESSORIES CATALOG—New 24-page dealer catalog, No. 14, illustrates and describes complete line of tire valves, parts and accessories. Included with each catalog is latest tubeless tire valve application chart indicating the proper valves to be used with any model of American and popular foreign make cars. Operating information, specifications, ordering, and packaging information are given for each applicable product. Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

336 NEW FILKO IGNITION PARTS CATALOG—Big 160-page catalog contains complete listings of all Filko Ignition Replacement Parts for practically every make and model of car, truck, bus and tractor. New simplified listings make the new Filko Catalog exceptionally easy to use. F & B Mfg. Co., 4248 W. Chicago Avenue, Chicago 51, Ill.

341 TRENDS IN TUBE AND TUBELESS TIRE REPAIR—12-page brochure, contains actual field case studies of two major truck fleets, a bus fleet, and 2 service stations in tire repair with electrical vulcanization. It examines each of these operations, pin-pointing each subject's benefits from and reasons for using Dillectric methods and equipment. Dill Mfg. Co., 700 E. 82nd St., Cleveland, Ohio.

345 HYDRAULIC BRAKE WALL CHART—Spiral bound listing up-to-date parts information for passenger cars and trucks, including listings for master and wheel cylinder repair kits, stop light switches and brake hoses. Els Automotive Corp., P.O. Box 701, Middletown, Conn.

350 1961 PISTON RING SPECIFICATION BOOK—Lists Hastings piston ring specifications for all popular cars, trucks, tractors and small bore engines, with nu-

merical cross reference. Hastings Mfg. Co., Hastings, Mich.

352 MASKING CHART—A step-by-step photo chart on fast, economical masking of automobile bodies for refinishing. Shows 12 recommended steps for masking. Department M1-13, Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn.

360 SPECIAL SERVICE STATION CATALOG—An 8-page illustrated catalog of John Bean equipment particularly well adapted to the service station and smaller garage operations. Includes wheel alignment, wheel balancing, car washing and headlight aiming equipment. Request Catalog L-1714 from John Bean Div., Food Chemical Corp., Lansing, Mich.

362 PORTABLE BODY FRAME ALIGNER—8-page illustrated catalog describes new John Bean portable body frame repair on both conventional and unitized construction cars. Catalog L-1722 from John Bean Div., Food Machinery & Chemical Corp., Lansing, Mich.

363 NEW LIFT-A-MATIC WHEEL ALIGNER CATALOG—12-page illustrated catalog gives complete description of the new John Bean Lift-A-Matic Wheel Aligner Rack and its allied tools and accessories. Covers all aspects of the revolutionary new air lift principle that allows the aligner to be installed in an ordinary service bay without the usual long runways and approaches. Request free Catalog L-1742. John Bean Div., Food Machinery & Chemical Corp., Lansing, Mich.

365 WHEEL ALIGNMENT EQUIPMENT CATALOG—20-page illustrated catalog describes the John Bean line of Visualiner, mechanical and portable wheel alignment equipment, tools and accessories. Various types of pit and floor aligner models, as well as modernizer kits, are detailed in the literature. Catalog L-1671. John Bean Div., Food Machinery & Chemical Corp., Lansing, Mich.

366 BODY-FRAME REPAIR EQUIPMENT CATALOG—16-page catalog describes and illustrates John Bean body and frame repair equipment available. Photos of typical operational set-ups are also included. Catalog L-1623. John Bean Div., Food Machinery & Chemical Corp., Lansing, Mich.

368 SEALANT APPLICATION CHART—Lists 11 products giving specific instructions, such as setting; drying; application use; temperature and resistance. Also the convenient Application Gun and Tip is illustrated. Permatex Co., Inc., 300 Broadway, Huntington Station, Long Island, N.Y.

372 HANSON TESTERS—16-page catalog contains helpful information on basic auto testing equipment—serves as guide in selection of testers for tune-up and major overall jobs. Harvey E. Hanson Co., 171 W. Commercial St., Paw Paw, Mich.

383 TIME SAVING ELECTRIC IMPACT TOOLS—Price list, complete details on electric Impacttools, sockets and accessories, and twelve multipurpose uses where Impacttools can save up to 90% of time required by hand methods. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N.J.

410 NEW AIR BRAKE MAINTENANCE BULLETINS—Series of bulletins, each devoted to a single unit. Fully illustrated with cross sectional, exploded and schematic drawings explaining every phase of the operations and maintenance. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

411 FOREIGN CAR COLOR DIRECTORY—Shows more than 500 colors used on imported cars. Shows actual color samples and gives mixing formula information for older models. Martin-Senour Co., 2500 S. Senour Ave., Chicago, Ill.



NEW PRODUCTS AND CATALOGS

800—Vacuum Gauge

The "T-46" vacuum gauge announced by C. E. Niehoff & Co., 4925 West Lawrence Ave., Chicago 30, Ill., is so designed that should it be dropped the user can recalibrate it in his own shop with a manual zero setting.

Gauge detects incorrect carburetor adjustments, fuel pump failures and



locates leaking or sticking valves, muffler and exhaust back pressures. It operates from any convenient vacuum connection. Scale reads 0" - 30" vacuum and 0 to 10 lbs. pressure. Metal case has convenient hanging hook and unit comes complete with necessary fittings and operating instructions.

Want more info? Use coupon on page 97 and you will get it!

801—Converter

Use of a home table-model radio in any 12-volt car or boat reportedly is possible with the "Dynamo" converter introduced by Terado Co., 1068 Raymond Ave., St. Paul 8, Minn., which changes DC car current to 110-volt AC 60-cycle current.

No installation is required. Unit plugs in cigar lighter and needs no outside aerial. Complete with generator, condenser and ignition noise suppressor, device operates all electric shavers.

Want more info? Use coupon on page 97 and you will get it!

802—Nut Wrench

"No 656" manifold nut wrench announced by Owatonna Tool Co., Owatonna, Minn., is said to remove and install quickly the nuts situated at rear of the manifold (both left and

right bank) on 1954 through current-model Ford V-8 engines.

Want more info? Use coupon on page 97 and you will get it!

803—Body Panel Catalog

A 16-page complete body panel replacement guide catalog published by The L. R. Oatey Co., 4700 West 160th St., Cleveland 35, O., reportedly enables the user instantly to find and order a specific replacement panel for any make and model car—1950 to present, including net and list price. More than 320 body panel replacements are listed by car make and by an alphabetical number index. Included is a visual panel guide showing placement on specific body types for rocker panels, quarter panels, fender panels, dog legs, headlight patches and door panels.

Want more info? Use coupon on page 97 and you will get it!



Here's the **LOWEST COST** complete
"DISPENSING COMBINATION" on the market

DL \$3⁹⁵
SPECIAL

includes

- DL LIQUID HAND CLEANER
Two One-Half Gallons
- PLASTIC DISPENSER
- WALL BRACKET

Liquid DL is a product of DL Products Inc., makers of famous DL Handi-Cleaner, the original, waterless cream type hand cleaner, for more than 25 years.



DL PRODUCTS, INC.
Buffalo 4, New York

For full details write to Dept. SAJ-4-22

LIQUID DL HANDI-CLEANER Insures "HEALTHY-CLEAN HANDS"

And here's why:

Cleans hands cleaner, faster! DL's exclusive deepdown cleansing action dissolves grease, grime, dirt and actually "lifts it out" removes tenacious stains other hand cleaners can't touch.

SAFER — INDEPENDENT LABORATORY TESTS CERTIFY DL IS A NON-TOXIC PRODUCT.

Contains both LANOLIN and HEXACHLOROPHENE — conditions hands as it cleans, guards against dermatitis and infections.

Complete — ready to use.

Mount bracket on wall, bench, pump island, etc., insert one-half gallon container, thumb screw locks container securely in place, remove metal cap, insert dispenser . . . and you have a complete hand cleaning unit at one low price!



Canadian Offices: 236 Norseman Street, Toronto 18, Ontario

804—Air Conditioner

Suitable for use in both compact and standard-sized cars, a smaller automobile air conditioner announced by Automatic Radio Mfg. Co., Inc., 30 Washington St., Brighton, Mass., reportedly achieves complete cooling in 30 seconds and air circulation to every cubic inch of space with the patented "Polar-Jet Coolerator" and a compressor of 3-ton capacity.

The miniaturized cooling coil is designed for fast pulldown to low-temperature operating conditions, it was claimed. Outer controls, also smaller than formerly, reportedly give more exact variations in cooling. The greater part of the air conditioner extends

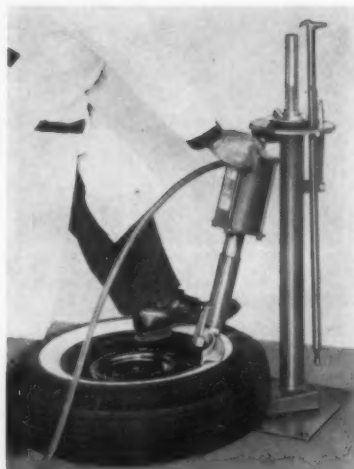
back under the dashboard so that only the controls and nozzles are visible, leaving room for a third passenger in the front seat. Unit fits smoothly into compact cars, the manufacturer said.

Want more info? Use coupon on page 97 and you will get it!

805—Tire Changer

"Model 58DM" air-powered tire changer announced by May Brothers Mfg. Co., 21300 Eureka Road, Taylor, Mich., features the all-steel, heavy-duty "Jet Flow" bead breaker, plus redesigned off-center guide ramp and the company's quick-lock mechanical wheel hold-down.

Changer operates from a standard



air chuck and requires only 14 square feet of floor space. It is furnished complete with "Quick-Switch" mounting and demounting tire bar.

Want more info? Use coupon on page 97 and you will get it!

806—Solderless Terminal Tool

"No 9900" hand tool that cuts solid or stranded wire, strips off the insulation and crimps on solderless terminals has been announced by R. N. Hunter Sales Co., 9851 Alburton Ave., Santa Fe Springs, Calif.

Small and compact, tool will fit into a shirt pocket, yet it has sufficient leverage to crimp securely a No. 12-10 size wire, the manufacturer said. It is made from spring steel and the cutting edge reportedly is ground. A sliding set screw on one handle permits desired setting for continuous stripping of a particular size wire. Tool is designed to work with wire sizes from No. 22 through No. 10.

Want more info? Use coupon on page 97 and you will get it!

807—Adhesives Manual

Correct use of the proper adhesive, coating or sealer needed for each automotive repair job is described in a manual published by Minnesota Mining and Mfg. Co., 900 Bush Ave., St. Paul 6, Minn., which includes a chart showing selection of the proper adhesive or sealer for rubber, metal, paint, cloth and other applications. Step-by-step directions are given for using each product.

Want more info? Use coupon on page 97 and you will get it!

808—Fuel Pump Wall Chart

For quick, easy, on-the-job replacement parts reference, a 17" x 22" fuel pump application wall chart announced by American Motor Products Co., Fond du Lac, Wis., carries original equipment stock numbers and the proper Ampco stock number. All popular U.S. cars are shown in alphabetical order, giving model and year. Minimum and maximum pressure in pounds is included.

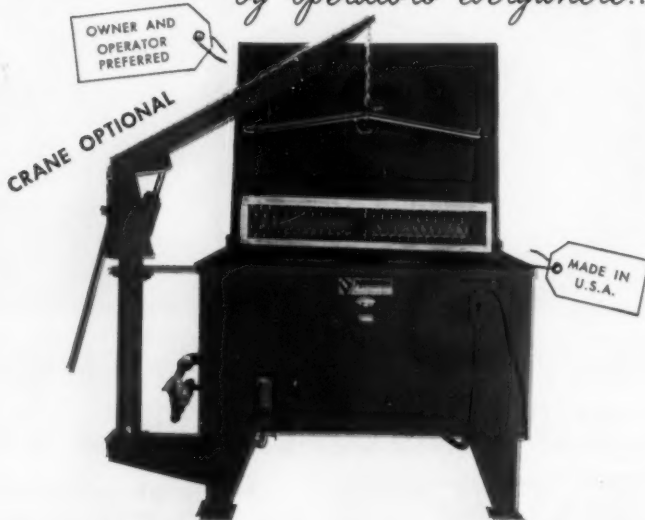
Want more info? Use coupon on page 97 and you will get it! (More New Products on page 106)



STORM-YULCAN

PREFERRED

by operators everywhere..



MODEL 200 SUPERCLEAN CLEANING MACHINE

This entirely NEW machine introduces a cleaning action by transverse motion. The turbulence created is like an ocean tide SAVE on cleaning costs with Model # 200! It's insulated with fiberglass. Simple to install — just connect to 110V and gas outlet. Use S-V FERROBRITE cleaning compound for best results.

Clean Better — Faster — More Economically

Write for Free Literature on all S-V Equipment

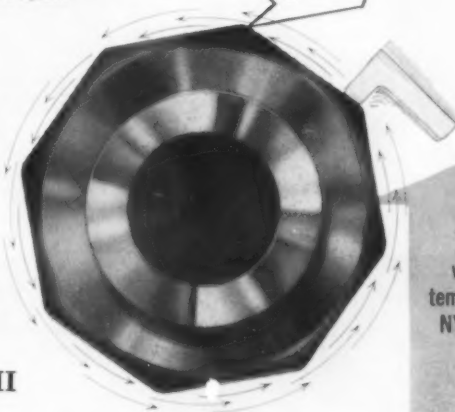
STORM-YULCAN, Inc.

MANUFACTURERS OF AUTOMOTIVE ENGINE REBUILDING EQUIPMENT
2225 Burbank Street • Fleetwood 1-3735 • Dallas 35, Texas

TROUBLES...FAILURES...resulting from post-war changes in the cam such as the introduction of porous hex-steel, and new lobe designs together with higher speeds made necessary the development of a new cam follower material. Filko "Crown Jewel" engineering was **FIRST WITH THE ANSWER! NYLON!** Not just pure Nylon, which is too hard and can excessively wear the cam lobes, but **TEMPERED NYLON** that balances the wear characteristics of both steel and nylon!

it all
started
here
7 years
ago

concerning
the most
important
advance in
contact sets
since
World War II



1ST
with
tempered
NYLON

THE NYLON RECORD IS ALL-FILKO

FILKO FIRST IN FIELD BY 7 YEARS
HERE IS THE BOX SCORE

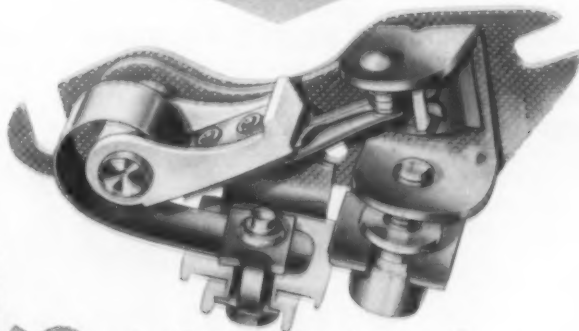
	NYLON CAM FOLLOWER	UNITIZED ARM
Filko	1954	1959
Brand W	1960	not yet
Brand X	1955	not yet
Brand Y	1958	1960
Brand Z	1958	not yet

All other brands continue to use
out-dated compositions.

Filko pioneered it...introduced it
and continues to **SET THE PACE**

7 YEARS after introduction,
Filko is still the only major manufacturer
with a complete line of unitized nylon
contact sets. Just one other has imitated
the Filko unitized Nylon construction!
ONLY FILKO OFFERS Unitized Nylon for
everything . . . cars (including compacts) . . .
trucks . . . tractors . . . and marine engines.
SEND FOR FREE "NYLON FACTS" bulletin
or see your Filko Jobber.

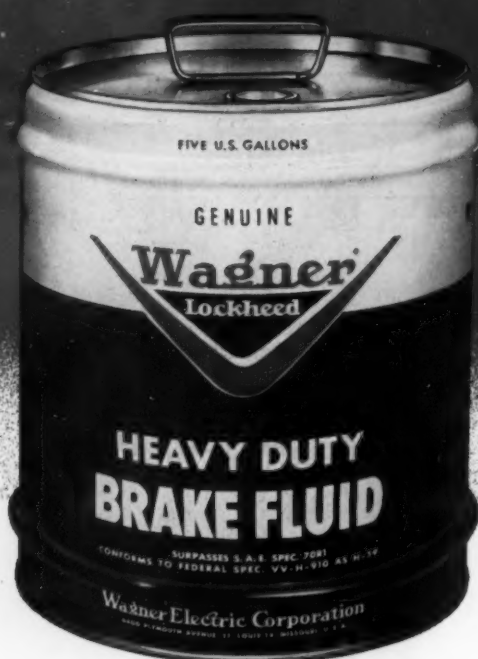
For
replacement—
1ST
with
UNITIZED
NYLON ARM
making cam
follower and arm
into one unit



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a product of **F. & B. Mfg. Co.**
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This brake fluid has special

T-R-I *



WAGNER LOCKHEED HEAVY DUTY BRAKE FLUID (with T.R.I.) surpasses S.A.E. specification 70R1, meets State laws, and conforms to Federal specifications. Performance proves it to be the best brake fluid in its price range.



WAGNER LOCKHEED SUPER HEAVY DUTY BRAKE FLUID (with T.R.I.) is the finest on the market . . . surpasses S.A.E. specifications 70R1 and 70R3, meets State laws, and conforms to Federal specifications.

You're always right with the Quality Line

Wagner® Lockheed®

the best known—and most trusted name in brake service products

LOCKHEED BRAKE PARTS, FLUID, BRAKE LINING and LINED BRAKE SHOES • AIR HORNS • AIR BRAKES • TACHOGRAPHS

Wagner Lockheed

BRAKE FLUID

has special *Temperature Resistant Ingredients
for functioning under both high heat and sub-zero temperatures

The patented formula of Wagner® Lockheed® Brake Fluid includes the use of special T.R.I. (Temperature Resistant Ingredients) in the manufacture of this *safe* product.

Compounded in correct chemical balance in the brake fluid manufactured by Wagner, these temperature resistant ingredients help make the fluid *function perfectly under all operating conditions*. Fluid maintains high temperature resistant characteristics, yet functions in sub-zero temperatures.

Correct Chemical Balance of *all* ingredients gives Wagner Lockheed Brake Fluid many additional important advantages:

- The right amount of costly type lubricant to provide proper lubrication to all parts of the brake system.
- Exactly enough moisture absorber so that

metal parts in the brake system will not rust or corrode.

- Does not cause cups or hose to swell.
- Forms no gummy residue.
- Does not evaporate rapidly.

You Protect Lives—by providing safer brakes—when you use Wagner Lockheed Brake Fluid in the brake system of a car, truck or bus.

There's no brake fluid *safer* than Wagner Lockheed—and there's none better. Made by Wagner—the world's largest manufacturer of top-quality brake fluid. Used by car, bus, truck and trailer manufacturers as original equipment.

For Details—consult your nearest Wagner Distributor, or write us for information on our complete line that includes brake fluid, brake parts, power brake repair kits, brake lining and lined brake shoe sets. Ask for **FREE** Catalog AU-500.



ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

Wagner Electric Corporation

6362 PLYMOUTH AVENUE, ST. LOUIS 33, MO., U.S.A.
(Branches in principal cities in U.S. and in Canada)

Please send us your AU-500 Catalog.

NAME _____

FIRM NAME _____

ADDRESS _____

CITY & STATE _____

WF01-2

New Products

(Continued from page 102)

809—Puller

"No. 518" 2-way, 3-way flange-type puller introduced by Owatonna Tool Co., Cedar St., Owatonna, Minn., is designed to remove quickly and easily harmonic balancers, timing gears, etc., regardless of whether they have 2 or 3 tapped holes.

Puller consists of body, forcing screw, special plug, 3 hex head screws $\frac{3}{8}$ " - 16NC x 3" and 3 hex head cap screws

$\frac{3}{8}$ " - 24NF x 3". It handles bolt-circle diameters of $1\frac{1}{2}$ " to 4 $\frac{1}{2}$ ".

Want more info? Use coupon on page 97 and you will get it!

810—Engine Stand

To allow the mechanic to work on engines from any angle, a positioning stand announced by Owatonna Tool Co., 306 Cedar St., Owatonna, Minn., reportedly can handle easily engines weighing up to 1,200 lbs.

Engines are mounted to the stand by bolting the appropriate engine adapter bracket to the engine while on a chain hoist, then positioning engine against the stand and bolting adapter bracket to the stand. A self-locking matched

worm-and-sector gear set, with 8" crank, makes turning safe and easy, it was claimed. Engine may be rotated through a full 360°. "No. 1700" stand weighs 135 lbs. and can be bolted permanently to the floor or made mobile by addition of optional stand caster assembly.

Want more info? Use coupon on page 97 and you will get it!

811—Compression Gauge

For fast, accurate operation in checking cylinder and valve conditions, "T-47" compression gauge announced by C. E. Niehoff & Co., 4925 Lawrence Ave., Chicago 30, Ill., features a universal screw-in adapter which reportedly eliminates the need for hard-to-handle fittings.

The adapter, plus only one special adapter for the Chevrolet 345 engine,



was said to handle all cars on the road today. The "T-47" requires hand pressure only—no wrenches—and is calibrated to 300 lbs. It shows maximum pressure in cylinder and holds reading several minutes.

Want more info? Use coupon on page 97 and you will get it!

812—Torque Wrenches

For making mechanical checks of stress, strain, thrust, tension and compression where a record of the peak reading is desired, "S" model torque wrenches announced by P. A. Sturtevant Co., Addison, Ill., are equipped with the patented "Sensory" signaling mechanism which reportedly functions entirely independent of the measuring element.

Direct-reading scale permits on-the-job recheck of the pre-set torque. Pivoted handle permits accurate and cor-



rect torque control when wrench is used with adapters and extensions. The "Sensory" mechanism (1) sounds a distinct click, (2) imparts a strong, definite impulse to the hand the instant the pre-set (desired) torque is applied and (3) may be read by sight. The torque may be seen easily as the pointer indicates the torque being applied on a legible scale that is readable from all working angles.

Want more info? Use coupon on page 97 and you will get it!
(More New Products on page 110)

GUARDING YOUR PROFITS

because they're priced 24% to 66% Lower than factory duplicates



NOW!

Grand Quiet-tone **MUFFLERS**
GARD-KOTE

with

RUST-RESISTANT ALLOY COATED STEEL CASE AND END CAPS (INSIDE and OUTSIDE)

Add longer lasting protection against rust and corrosion to time-tested efficiency *plus* acceptable tone...straight-thru fuel economy...lower cost... "Turbo-Jet" sound control without cutting down power! Extra "sell" galore!

Write today for CATALOGS AND PRICES that include popular Chrome Side Pipes and Lakes Pipes



BANK ON fast turnover in Grand **DUAL EXHAUST SYSTEMS**

Elimination of dual exhausts by car makers means more drivers want to buy Grand, the complete line that's so easy to sell, so easy to install.



AUTOMOTIVE PRODUCTS, Inc.

5310 W. 66th St. • Chicago 38, Illinois



Martin Senour's Dytho-Lac® combines the ease of application of a lacquer with the superior durability and other advantages of an acrylic. It's easy to apply, quick to dry...covers acrylic and baked enamel without applying special undercoats or thinners. Dytho-Lac colors are matched exactly to manufacturer's specifications—give unequalled luster and beauty because of their non-fading, non-chalking properties.

There's a complete selection of superior quality, shop-proven Martin Senour refinishing products available exclusively at N.A.P.A. jobbers throughout the country. Contact yours today!

Martin Senour...World's Leading Producer of "Shop Engineered" Products!

AUTOMOTIVE DIVISION

**THE MARTIN-SENOUR
COMPANY**

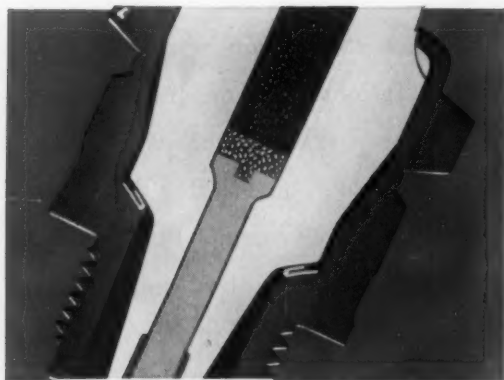
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Win new customers and **FIRE-RING** **for ALL FORD AND**

Offer more to your customers with these Superior AC Features



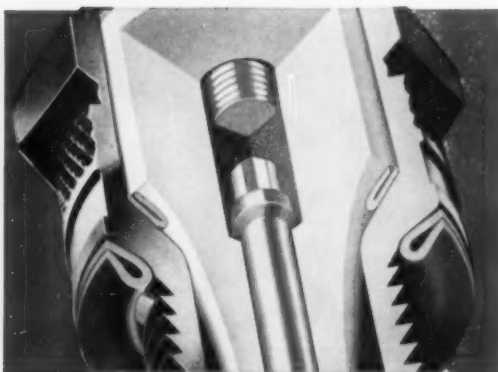
Superior resistor design imbeds the resistor in a copper-glass seal for positive protection against moisture and gas leakage.



Superior extended shell design protects the insulator tip and center electrode for easier starting and longer electrode life.



Superior Hot Tip design heats fast to burn away fouling deposits as they form to provide exclusive self-cleaning action.



Superior sealing design offers copper-glass internal seal and pressure-formed external seals for sure prevention against overheating.

new profits by recommending . . .

SPARK PLUGS CHRYSLER CARS!

Cover Ford and Chrysler customers with the Profit-Building AC Line

There's an AC Fire-Ring Spark Plug engineered for all Ford Motor Company and Chrysler Corporation cars. For example, just four types—in regular, regular tapered seat, and extended shell tapered seat designs—cover all Ford, Mercury, Edsel, Thunderbird, Lincoln and Continental cars. Just twelve types—in regular, resistor and extended shell designs—cover all Plymouth, Dodge, De Soto, Chrysler and Imperial cars. Call your AC wholesaler today and start winning new spark plug customers and greater spark plug profits.



Recommend



**FIRE-RING
SPARK PLUGS**

They're Best for All Cars!

New Products

(Continued from page 106)

813—Power Steering Kit

On-the-spot replacement of power steering lines for any make, year or model of car, truck, bus or tractor reportedly can be made with "Surgepruf" power steering replacement kit introduced by Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill., contained in a metal carrying and storage case with all necessary couplings, tube assemblies and adapters,

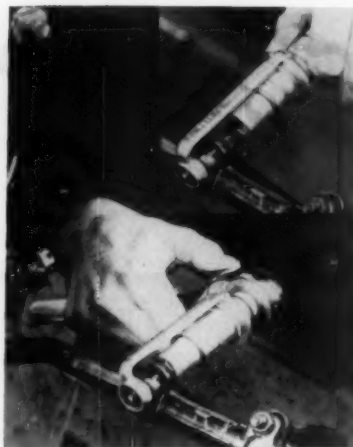
plus 25' of $\frac{3}{8}$ " I.D. hose of 4,500psi burst pressure.

Hose has oil-resistant Buna-N inner tube bonded to double rayon braid. The outer cover is of neoprene. All fittings are precision-machined of steel and zinc-plated to resist corrosion. The kit makes it possible to duplicate any hose assembly in a matter of minutes, it was claimed. Full instructions show how to match, in every detail, the hose being replaced.

Want more info? Use coupon on page 97 and you will get it!

814—Tie-Rod Wrench

Loosening tie-rod sleeve bolts is a one-hand operation reportedly made



faster and easier with a two-in-one wrench introduced by Bear Mfg. Co., 2016 5th Ave., Rock Island, Ill.

To use, depress the spring of the "No. 8225" wrench, slip wrench over nut and release the spring to engage wrench with the bolt. Loosen with a ratchet. All of the tie-rod bolts may be loosened or tightened without detaching ratchet from the wrench, the manufacturer said.

Want more info? Use coupon on page 97 and you will get it!

815—Back-Up Light Kits

Complete back-up light kits with lenses, bulbs, wiring, clips, screws and switches for 1961 Chevrolet and Ford passenger cars, announced by Auto Lamp Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill., reportedly offer dealers, garages, body shops and service stations the opportunity to provide customers with de luxe back-up lights without the bother of hunting for each component from stock.

Ready to install, kits are said to be exact duplicates of manufacturer's original equipment. They are available for both standard and automatic transmissions for all 1961 Chevrolet passenger cars and for automatic transmissions for Ford passenger cars and station wagons.

Want more info? Use coupon on page 97 and you will get it!

816—Volkswagen Gas Gauge

To supplement hand-control valve operating an auxiliary fuel tank, which is standard equipment on the Volkswagen, an electrical fuel gauge introduced by Accurate Products, Inc., 135 North Spring St., Indianapolis, Ind., is operated by a float in the gas tank. It's designed to eliminate owner's fear of running out of gas.

A sending unit is mounted in the tank by drilling a single $11/32$ " hole. The receiving unit, which is the gauge itself, is encased in a chrome strip panel ready for mounting on the dashboard. Voltage is compensated for the Volkswagen's 6-volt electrical system. The illuminated-type gauge comes complete with mounting bracket, bulb socket and 6-volt bulb.

Want more info? Use coupon on page 97 and you will get it!

Here's the "Bell-Ringing" News...



THE 1960 MODEL
"RITE-RING"
DRIVEWAY SIGNAL
by **ACME**

Loud, clear bell rings throughout the station

No. 700

- ★ No Relay
- ★ No Transformer
- ★ No Contact Points to line up

Replaceable Coil (No. 705) can be installed in just a few moments...ON THE SPOT!

Write for complete catalog

ACME
for Accuracy
SINCE 1915

ACME AIR APPLIANCE Co., Inc.
205 NEWMAN STREET • HACKENSACK, N. J.

5-3 **HOW GOOD ARE YOU?**



Can you find a perfect five-pointed star in this pattern?





Attach the solution to your business card or letterhead and mail to ACME. If you're right, we'll send you a "Genius Award" for your accomplishment!

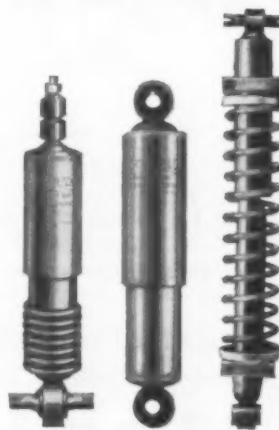
Relax each month with the ACME "Problem Corner"

This man is MAKING MONEY!



*He's installing **SKY-RIDE** shock absorbers*

● You can make money, too, when you sell and install exclusive Toledo Steel SKY-RIDE airplane-type shock absorbers. Toledo Steel supplies the essentials—a fast-moving assortment of rugged SKY-RIDE shocks packed in a self-display carton and a complete kit of display materials and selling helps. All you need to start making money is a jack, lift or pit and a good set of wrenches. Your profit on every SKY-RIDE is substantial, and your labor profit is extra!



MEET EVERY NEED! Sky-Rides for normal or heavy duty service, plus Sky-Ride Shock Springs to correct "bottoming".

FOR FULL DETAILS,
SEE YOUR TOLEDO STEEL
DISTRIBUTOR,
OR WRITE...



TOLEDO STEEL PRODUCTS

Division of Thompson Ramo Wooldridge Inc.

6402 CEDAR AVENUE · CLEVELAND 3, OHIO

WORLD'S FINEST PARTS . . . WORLD'S FINEST SERVICE

817—Air Conditioner

Condensing unit of an improved "Portamatic" truck air conditioner announced by Climatic Air Sales, Inc., 3030 Canton St., Dallas 26, Texas, may be mounted in any convenient location on frame or can be hung as a saddle-type fuel tank.

Evaporator (cooling coils) can be mounted under dash, between seats, overhead, in sleeper bunk or on floor. Since unit operates on its own battery, it does not require the truck motor to be running for cooling. It can maintain a temperature from 70 to 74° in truck cab and sleeper compartment and no special tools are required for instal-



lation. Complete unit can be transferred from truck to truck, quickly and easily, the manufacturer said, and it does not perforate or damage cab. Pushbutton controls and automatic thermostat re-

portedly maintain constant temperature control under all conditions. Six adjustable air louvers permit circulation of air by 2 squirrel-cage blowers. Cooler dehumidifies, dries clothing and bedding and keeps them fresh, according to the company.

Want more info? Use coupon on page 97 and you will get it!

818—Gasoline Pump Spout

"Dial-A-Gallon" gasoline pump nozzle spout introduced by Dial-A-Gallon Division, Ideas, Inc., 214 Ivinson Ave., Laramie, Wyo., automatically shuts off after delivery of a selected number of gallons or "dollar's worth," freeing the service station attendant for checking oil and other sales possibilities.

Overage is eliminated, it was claimed. The dial on spout selects shut-off a fraction of a gallon before 3, 5, 7 or 10 gallons, or at fill. Various "dollars'



worth" and intermediate gallonage points may be marked on the dial. Final filling of the undelivered fraction is done manually, using the pump meter as an exact indicator. As a safety precaution, the flow of gasoline is shut off when the tank becomes filled, regardless of dial setting. Spout interchanges with ordinary spout on automatic nozzles and comes complete with instructions for installation, operation and adjustment to pump characteristics.

Want more info? Use coupon on page 97 and you will get it!

819—Battery Chargers

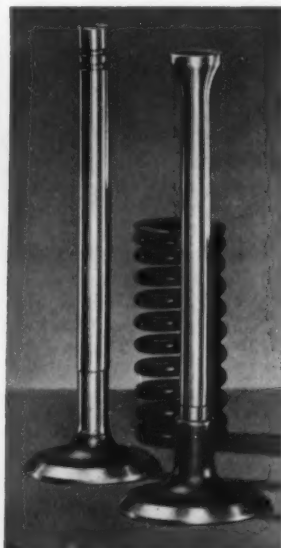
Positive protection against damage to alternators reportedly is assured with a line of battery chargers announced by Fox Products Co., 4720 N. 18th St., Philadelphia 41, Pa., which, without removing battery cables, will provide protection against reverse connections or charging peaks—either one of which can seriously damage alternator charging systems.

Want more info? Use coupon on page 97 and you will get it!

820—Resonator Eliminators

To boost engine efficiency, provide reduction in back-pressure and assure better gas mileage for any car, a line of resonator eliminator replacement pipes announced by Grand Automotive Products, 5310 W. 66th St., Chicago, Ill., is said to be easily and quickly installed by simply unclamping or cutting out the old resonators and replacing them with the new pipes.

Want more info? Use coupon on page 97 and you will get it!



"YOU SAY YOU HEARD WHAT SOUNDED LIKE A DULL THUD?"

Keep that satisfied sparkle in your customers' smile—install

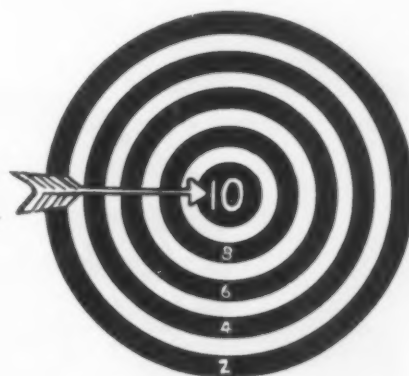
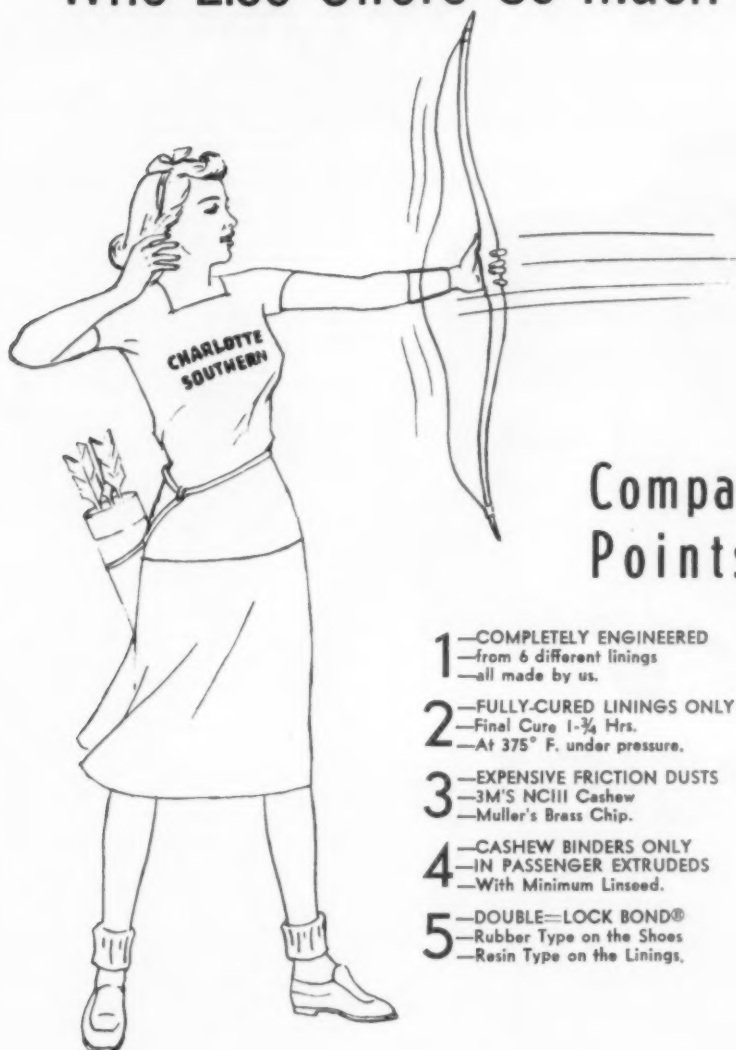
Manley
airchrome valves
and springs

Manley Valve Corporation, 15th St. & Fairmount Ave., Philadelphia 30, Pa. Supplier to leading original equipment manufacturers. District Sales Representative, J. S. Connell Co., Dallas.

THE QUALITY BRAKE SET

In the Low Priced Field

Who Else Offers So Much for So Little?



Compare Our 10 Quality Points with the Best!

- | | |
|--|---|
| <p>1—COMPLETELY ENGINEERED
—from 6 different linings
—all made by us.</p> <p>2—FULLY-CURED LININGS ONLY
—Final Cure 1-3/4 Hrs.
—At 375° F. under pressure.</p> <p>3—EXPENSIVE FRICTION DUSTS
—3M'S NCIII Cashew
—Muller's Brass Chip.</p> <p>4—CASHEW BINDERS ONLY
—IN PASSENGER EXTRUDES
—With Minimum Linseed.</p> <p>5—DOUBLE—LOCK BOND®
—Rubber Type on the Shoes
—Resin Type on the Linings.</p> | <p>6—100% DRY-MIX ON TRUCK SHOES
—"Heat-and-Pressure" Linings
—Chip and Fiber Block only.</p> <p>7—END-RIVETS ON TRUCK SHOES
—In addition to Bonding
—for added safety.</p> <p>8—FMSI NUMBERS THROUGHOUT
—with full Car Data on every box.</p> <p>9—SHOES STRAIGHTENED HOT
—By striking dies
—then chilled.</p> <p>10—MATCHED SHOES IN EACH BOX
—Webs, Throats and Anchor Cutouts
checked by gauges.</p> |
|--|---|





New officers and directors of the Georgia Automobile Dealers Association are (l. to r.): Charles S. Henderson of Savannah, director; R. H. East of Atlanta, second vice president; Julian Harrison, Jr., of Rome, director; J. H. Morgan of Swainsboro, treasurer; Lamar Ferrell of Decatur, director; Hayward Allen of Athens, first vice president; Kenneth H. Thomas of Columbus, director, and Thomas M. Callaway, Jr., of Decatur, president. L. L. "Lew" Austin of Atlanta is the veteran executive vice president.



automatically TAKES OVER WHEN A BREAK IN THE LINE OCCURS . . . FRONT OR REAR . . . PREVENTS TOTAL BRAKE FAILURE!

Announced only a few months ago, editorial comment created an avalanche of potential customers who want to know, "Where can we buy it?" This amazing and foolproof device is a "must" for every vehicle with hydraulic brakes. Nothing can ever go wrong with it . . . takes less than 30 minutes to install and provides low cost "life insurance" every driver can afford. That is why Liberty Mutual Insurance Company safety-engineers choose the SBD* In-the-Line *SAFETY BRAKE DEVICE for installation on their Survival Car!

The SBD* In-the-Line
*SAFETY
BRAKE
DEVICE
SELLS FOR

\$14.95



It comes individually packaged and is merchandised with dramatic point-of-sale dealer aids. Sold through Jobbers on a selective basis. Write for literature.

ALEX MANUFACTURING CORP. • BUILDING 196 • N. Y. INTERNATIONAL AIRPORT • JAMAICA, 30, N. Y.

Car Spending Is Higher, GM Chairman Says

CONTRARY to what might be expected in the face of competition from other goods and services, the percentage of income that the consumer spends for cars has been higher, not lower, in the post-World War II period than it was in prewar years.

That observation by Frederic G. Donner, General Motors board chairman, before the 53rd annual meeting of GM shareholders in Wilmington, Del., was followed by the statement that in 1958, the lowest postwar year to date excluding the three years immediately after the war when supply was very short, 3.9% of consumption expenditures was directed toward cars. This, he said, compares with 3.3% in 1929 and 1941, the highest prewar years.

"In the last eight years, about 4.9% of total consumer expenditures has been for automobiles," he said. "If the high year of 1955 and the low year of 1958 are omitted, the automobile expenditure ratio for the other six years has been remarkably stable, varying only two-tenths of a per cent either way from the average."

Donner said stocks of cars in dealers' hands are at "a level that we consider normal in relation to current demand and the largest selection of cars that are offered."

"If our dealers today did not have an adequate inventory of cars, they would not be in a position where they could effectively compete."

DK-147

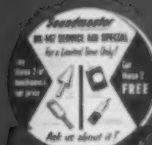
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SPECIAL

FROM

Soundmaster

FOR A
LIMITED
TIME
ONLY...



A "GET ACQUAINTED" OFFER ON SOUNDMASTER SERVICE TOOLS

Buy
these
2 tools
at your
**MECHANIC'S
NET PRICE**

Soundmaster

DK-138 PIPE ROUNDER

Now you can reshape pipe and bushing ends, inside and out . . . FAST . . . for accurate, gas-tight exhaust system fit. The DK-138 is a smooth, friction-free, forged steel cone with a rust-proof cadmium finish and safe knurled handle. A must, for fast, profitable exhaust system service.

Soundmaster

DK-145 PIPE EXPANDER

Quickly removes clamp grooves and dents from pipes and muffler bushings — leaving smooth rounded surfaces for perfect replacement fits. Re-forms pipes of 1 5/8" I.D. to 2 1/8" I.D. up to a length of 6 1/2" . . . molded rubber segment retainers are oil and grease resistant for long life . . . all metal parts are rust proofed.



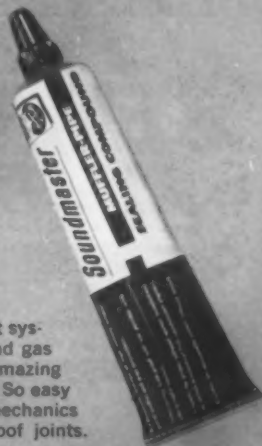
You get
these 2
service
aids
FREE

DK-160 EXHAUST SYSTEM REMOVAL OIL

New, DK-160 rust solvent developed especially to help speed up your exhaust system service. Outstanding features are greater SPEED and PENETRATING action . . . greater SPREADING ability . . . gets into remote crevices . . . breaks rust FAST on all bracket, hanger or clamp connections.

No. 3170 MUFFLER-PIPE SEALING COMPOUND

Now, you can properly seal exhaust system connections against noise and gas leakage with Soundmaster's amazing self-drying asbestos compound. So easy to use, even inexperienced mechanics can make fool-proof, leak-proof joints.



AVAILABLE THROUGH YOUR NEARBY N.A.P.A. JOBBER

DE KOVEN MANUFACTURING COMPANY, Racine, Wisconsin

Steel Hits Aluminum For Bumper Use

ASLAM at aluminum-industry efforts to supplant steel bumpers with aluminum bumpers and at the lighter-weight metal's physical capabilities for automobile bumper use has been delivered by Wilfred D. MacDonnell, president of Great Lakes Steel Corp.

MacDonnell told a gathering of newspaper, wire service, business-industry magazine and TV-radio editors at Detroit last month:

"Over the past five years a consistent attempt has been made to generate public interest through high-powered advertising and sales promotion for a competitive aluminum bumper that its proponents will probably never be able to deliver."

The press conference featured a series of steel-versus-aluminum bumper test demonstrations. One used shotgun blasts to prove out steel's greater abrasion and dent resistance. Another showed that cleaning fluids used by washracks cause rapid surface deterioration of

aluminum bumpers. The same fluids enhanced steel bumper appearance.

Other demonstrations showed aluminum bumpers that have been proposed for adoption by U. S. automobile manufacturers losing out to steel bumpers in comparisons of "beam strength" for jacking up a car, corrosion resistance, ability to protect body sheet metal and grille from costly damage in parking and minor collisions and processing ability for being shaped into modern automobile bumper design.

"Any aluminum bumper would be a costly-to-make inferior product that would deliver the shortest appearance and service life to the owner who takes the best care of his car—the owner, for example, who gets his car washed regularly at the neighborhood washrack," MacDonnell said.

L-O-F Glass Continues As GM's Major Source

LIBBEY-OWENS-FORD Glass Co. will continue in 1962 as the largest supplier of General Motors automotive glass requirements, and as sole supplier to Fisher Body Division through the 1961-model run, according to George P. MacNichol, Jr., L-O-F president.

Not once, MacNichol said, during the 30-year period his company has supplied General Motors has any GM assembly line halted for lack of glass. During that period, L-O-F made substantial contributions to the field of automotive safety glass, especially E-Z-Eye tinted glass, shaded windshields and the panoramic curved windshields which General Motors introduced in '54.

L-O-F also furnishes automotive glass to American Motors, Studebaker-Packard, Willys, International Harvester and other truck and body manufacturers. It also furnishes plate and sheet glass to fabricators of laminated and tempered glass automotive parts.

Memphis Pontiac Firm Swings 323-Car Deal

PONTIAC Motor Division and Douthitt-Carroll Pontiac Co. of Memphis will complete one of the South's largest single automobile deals with delivery of 323 1961 cars to the Memphis Coach Co., Inc., for ambulance conversion.

Representing a \$2,000,000 U.S. government contract, the ambulances are earmarked for use by the various military services at home and abroad and by Veterans Administration hospitals.

"WORLD BESTOS
brings in brake lining business
we could not touch before...and
we look forward to even bigger
sales increases"

Howard Wheeler (left) and William "Bill" Kingston of West Palm Beach, Florida



"Our dealers and brake specialists do a lot of foreign car service. They have found that the quality of foreign-made lining is generally superior to lining used on U.S.-made cars. They needed the best quality U.S.-made lining we could supply.

"We found that quality in World Bestos "PF" (Prescribed Friction). Our dealers installed "PF" and found it gave longer mileage and more dependable braking than foreign-made lining.

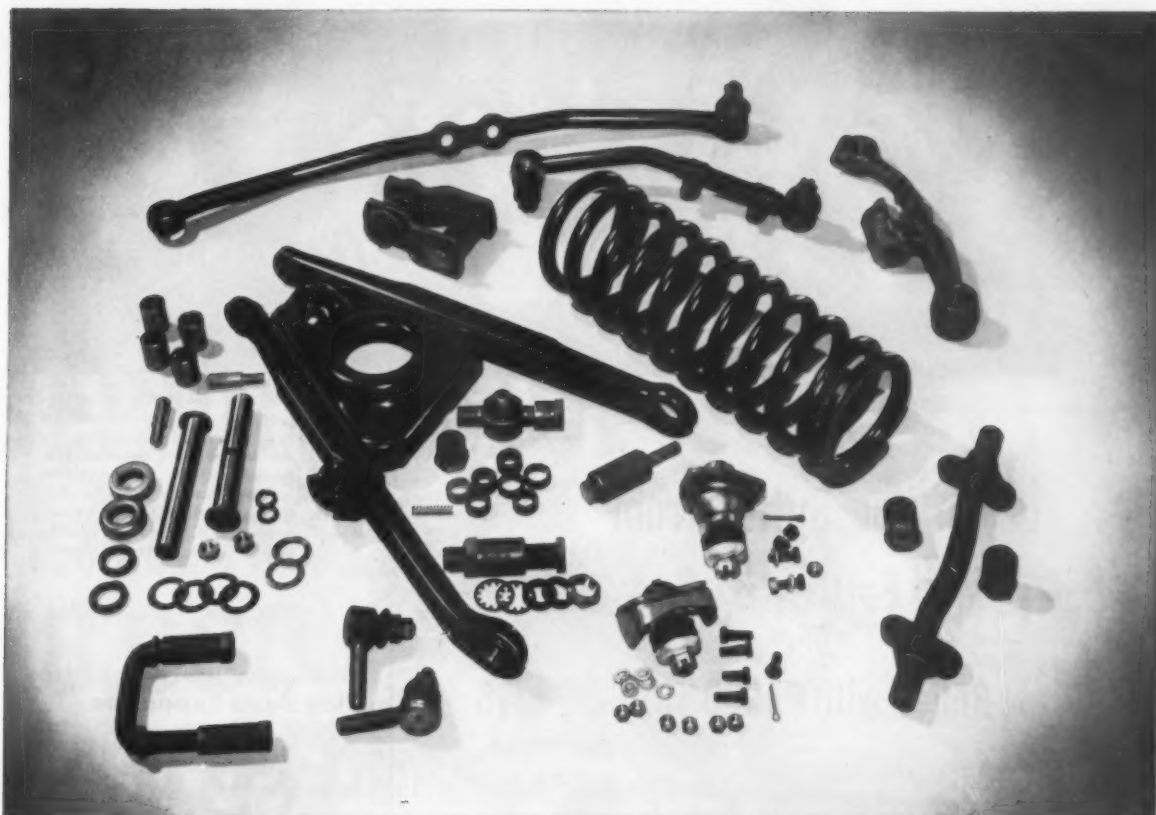
"Now, with World Bestos, we can supply brake lining sets for all foreign cars. We also supply bonded shoe sets and segment sets for all U.S.-made passenger cars, compacts and trucks.

"The World Bestos line is top quality material that brings in business we could not touch before and we look forward to even bigger sales increases in the future."

You can solve brake lining problems and win a bigger share of the replacement market. Write today for complete information . . . **WORLD'S FINEST BRAKE LINING**

WORLD BESTOS NEW CASTLE, INDIANA

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ALLIED Chassis Parts . . . the complete coverage line

● Every chassis part you see here meets or exceeds the automotive industry's most rigid standards for quality and reliability. Rigid inspections and quality controls give you and your customers the same performance safety with each Allied chassis part you install. The Allied line is complete—you can get the parts *you* need from *one* dependable, quick-service source—your N•A•P•A Jobber.

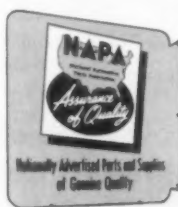
NEW! Torsion bars—of chrome manganese steel—heat-treated, shot-peened, Magnafluxed and thickly enameled to resist corrosion. Each bar pre-set and tailored for specific right or left hand position. 35% greater torsional strength gives better performance, longer life.

Ball Joint Assemblies • King Bolt Sets • Front Wheel Suspension Kits • Coil Springs • Tie Rod and Drag Link Assemblies • Control Arm Assemblies • Steering Support Kits • Shackles • Spring Bolts and Bushings • Ball Bearing Idler Arm Kits

ALLIED AUTOMOTIVE PARTS COMPANY
Indianapolis 7, Indiana, U. S. A.

**This sign—on your shop
—is your customer's
assurance of fast service
with quality parts.**

*Get it from your N•A•P•A Jobber
—a good man to know.*





Members of the Lake Worth unit of the Independent Garage Owners of Florida held this recent meeting, to which their ladies were invited. William F. Pierson, Jr., is the executive director of the state group and Mrs. Peg Homberger is the full-time executive secretary. W. R. "Tommy" Thompson of Miami is the state president.

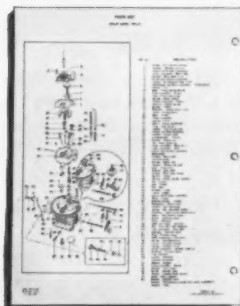
Do You Suffer from TUNE-UP-PHOBIA?

Get Fast Relief* with PACCO TUNE-UP KITS

*and money, too



Every Pacco Carburetor Tune-Up Kit contains step-by-step instructions for disassembly, cleaning, assembly, and adjustment of the particular carburetor you are working on . . . plus a clear diagram of every part.



If you can read, you can't go wrong. You can tune up carburetors like an expert—and make good money doing it.

**Always insist on PACCO—
the COMPLETE Tune-Up Kit**

There's one for all American cars, and most of the popular foreign makes.



PRECISION AUTOMOTIVE COMPONENTS COMPANY
Manchester, Missouri

Thompson Division Begins Cleveland Expansion

New headquarters for the replacement division of Thompson Ramo Wooldridge, Inc., will be the largest and most modern automotive parts warehousing and materials handling facility of its kind in the country, according to Vice President C. L. Kahlert.

To be situated on a 55-acre tract in Independence, O., a Cleveland suburb, the structure will include 50,000 square feet of air-conditioned office space in which the division's general offices will be housed, and 333,000 square feet of warehouse space. Total investment, including land, buildings and materials handling systems, is expected to run around \$3,000,000.

Associates' Income Dips For First Quarter

CONSOLIDATED net income of Associates Investment Co. totaled \$3,545,823 for the first quarter of 1961, compared with earnings of \$3,677,243 for the fourth quarter of 1960 and \$3,891,216 for the first quarter of last year, Board Chairman O. C. Carmichael, Jr., announced.

The volume of finance business totaled \$348,698,630, compared with \$482,199,013 the first three months of 1960. Retail and wholesale automobile business, down \$41,511,403 and \$89,222,260, respectively, from the first quarter of last year, provided the principal areas of decline in total finance volume.

IN ONLY A 3' X 5' AREA THIS SERVICE SHOP EARN'S \$18,000 PROFIT ANNUALLY



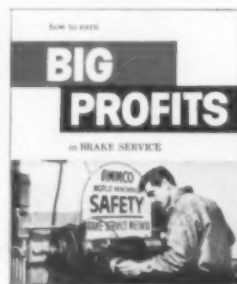
**"THE MOST PROFITABLE
AREA IN OUR SHOP"**

No. 20 Brake-Shop-On-Wheels complete
with Drum Lathe, Shoe Grinder, Drum Mike,
Brake Hone and other accessories.

Brake Service Did The Trick. Interested in earning \$1,200.00 per square foot? Nunley's Phillips 66 of Indianapolis is doing just that. Recently Burch Nunley equipped his station with an Ammco Brake-Shop-On-Wheels. The combination of Ammco's equipment and a regular merchandising program now brings in 50 brake jobs a month. Requiring just 3 x 5 feet of floor space (space often wasted by empty soft drink cases), the Brake-Shop-On-Wheels helps net a gross profit of over \$18,000.00 per year. The profit on just one complete brake job

a week more than covers the payment on the equipment and brings in a good profit, too. More and more "casual" customers have come in for brake work and have become "regular" customers since Nunley added his Brake-Shop-On-Wheels. This has increased volume and profits in gasoline, oil and TBA items as well as from other mechanical services.

REQUEST THIS FREE BOOKLET—Tells how you can easily increase sales and profits. Write today for **How To Earn Big Profits In Brake Service!**



NO DOUBT ABOUT IT.



IS THE BUY

AMMCO TOOLS, INC.

2100 Commonwealth Ave. • North Chicago, Illinois



TIME SAVERS

Adding Ruler Extension As Dimension Indicator

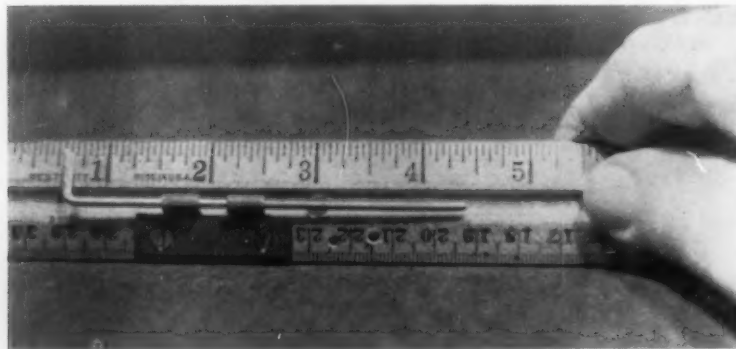
RATHER than deface the graduation marks on a ruler with penciled extensions, add a simple dimension

indicator by using half a small cabinet hinge and a piece of stiff wire.

Bend a right-angle hook (about $\frac{1}{4}$ " at one end of the wire and point this for use as an indicator needle. Insert the other end of the

wire in the eyes of the hinge half. The wire should be a smooth sliding fit and the hinge eyes can be bent slightly out of alignment to achieve "holding" power.

In use a dimension to be "held" is indicated by this device which is permanently fastened to one side of the ruler by means of small screws, thumb tacks or glue.—Glen F. Stillwell, 340 Ninth Street, Manhattan Beach, Calif.



Installing Ford, Chevy Idler Arm Bushings

FOR installing idler arm bushings on Fords and Chevys, or other cars with pressed-type bushings, use a piece of thread stock about $\frac{1}{2}$ " in diameter and approximately 6" long.



Hauling boats, trailers or just vacation luggage, nearly everyone overloads their car during summer!

Sell 'em safety, comfort and quality with CHAMP No. 110 or 211 (for the new short shock absorbers)! Packed in bright red, white and blue display cartons!

Remember . . . everyone who ever overloads his car, wagon or light truck **needs the added safety** of CHAMP overload springs!

Order From your Jobber

LIST: \$15.00 pair

Write for your 1961 Catalog!

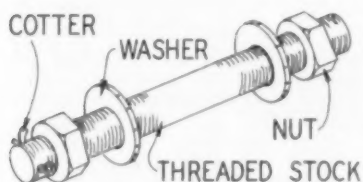
CHAMP-ITEMS, INC.
6191 Maple Ave. • St. Louis 30, Mo.



GOT A GOOD \$7 IDEA?

will be paid for every time-saver or shop short-cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 1760 Peachtree Road, N.W., Atlanta 9, Ga. Rejections cannot be returned.

Drill a small hole in one end for a cotterpin to prevent losing nut. Use two thick washers and start bushing in arm or drag link. Place installing device in bushing. Run nut down to desired place. Start other nut on other end with thick

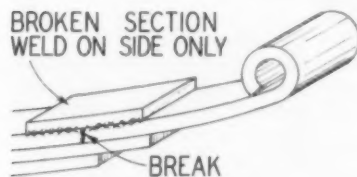


washer, using ratchet to pull bushing into place. When bushing is flush with arm or drag link, use a large socket over bushing, then pull bushing into proper place. I have found this method easier than using a press.— Bud Anderson, Mechanic, Mullis Motors, Morganton, North Carolina.

Making Stout Repair To Leaf Spring

ON AN International two-ton logging truck which had developed a rash of breaking main leaf springs, we effected a repair which has served for over two seasons in an almost impassable timber area.

We used a section of the spring we replaced to mend the next break and this saved waiting several days



for a new spring. We made no attempt to scarf the broken edges and weld across the spring, but laid the section (from the first broken spring) on top of the break and welded across the outside edges with 5/32" welding rod, jamming the broken ends together as tightly as possible before welding along the edges of the spring.

First welding pass was undercutting and penetrating well into both edges. On the second pass, we lowered the heat setting until the rod did no undercutting and the

weld flowed on smoothly.—Stanley Clark Service, Box 2162, East Bradenton, Florida.

Using Piece of Chain To Remove Rear Axles

REAR axles are sometimes very difficult to remove on 1955-61 Chevrolets and 1950-61 Fords without a special tool.

We use a piece of chain about 2' long. Bolt each end on two lug bolts. Slip a long, heavy bar (old Ford driveshaft) through chain.

TORQUE WRENCHES



This Mark* Guarantees:

1. Guaranteed accurate forever within 2% of maximum scale reading.
2. The only wrench that permits accurate use of adapter & extensions. Patented pivoted handle permits concentrated load position—the only way to obtain accuracy with adapters and extensions.
3. Rugged construction. Can be stored in a tool box with other tools.
4. Easy to use as any socket wrench.
5. Signalling models and direct reading styles to choose from.
6. A complete range to choose from to meet every service application.

*These are the same torque wrenches used and recommended by leading engine and equipment builders.



Valve and
Clutch Spring
Tester

Test new as well as used springs. Match sets of valve springs for top engine performance. Check clutch springs to prolong clutch life.

FREE

Torque Specification Book for over 130 makes and more than 1200 models of automobiles, (U.S. and foreign) trucks, tractors, outboards, motorcycles, diesel, aircraft, marine and small air cooled engines. Spark plug, wheel bearing, valve spring data and many helpful torque tips sent free upon request, write Dept. 608



PA **STURTEVANT CO.**
ADDISON QUALITY ILLINOIS

Hold bar on each side of chain and jerk against slack in chain. This usually removes axle without heating housing.—*Freddie Cigainero, 1708 Selma, Texarkana, Arkansas.*

Checking the Alignment On Windshield Openings

FOR checking alignment of windshield openings when regular alignment blocks are not available, cut several 1" pieces from an old windshield weatherstrip rubber and place them in the desired spots on

the glass.

Install in the same manner as a regular installation job. These pieces actually protect better than old-style wooden blocks, especially if new glass is used.—*Cecil Boling, The Glass Shop, 530 So. Wilson, Vinita, Oklahoma.*

Making Dolly to Repair Radiator Top Tanks

A DOLLY made by welding a 1¼" pipe coupling to the end of a 14" length of ¼" x 1¼" flat steel



stock off a spring leaf makes a perfect support to straighten out radiator top tanks like new.

Light tapping removes every dent and distortion, saving time in radiator reassembly.—*Harry J. Miller, 991 Forty-Second, Sarasota, Florida.*

Devising Paint Mixer For Good Job

A PAINT mixer that really does a good job and will not splash even if held at top of paint and turned at 1,750rpm can be made to any length desired. The one illustrated is 8½" long and can be used in quart or gallon can.

Shaft is ¼" in diameter to permit use in a ¼" drill, either hand or



HANDY DISPENSING CABINET FILLED WITH CHEMICAL REPAIR ASSORTMENT

Ideal workbench dispensing cabinet filled with complete needs to make "life of the tire" repairs. Conveniently compact, prevents waste and keeps all contents clean and immediately available. Fully stocked: 200 assorted patches, ½ pt. CHEMBOND Cement, one buffer-stitcher.

CHEMBOND PATCHES ACTUALLY FLOW INTO THE INJURY!



The live rubber flows naturally into the injured area (above), sealing out dirt and moisture to protect the cord fabric. Permanent bond when applied either hot or cold to tubeless tires or tubes. Patch edges are extremely feathered.

nent bond when applied either hot or cold to tubeless tires or tubes. Patch edges are extremely feathered.

H.B. EGAN MANUFACTURING COMPANY
MUSKOGEE, OKLAHOMA TORONTO, CANADA



electric. Blades can be any kind of a steel washer 1½" in diameter with a ¼" center hole.

Make four cuts with hacksaw in each washer, then weld to shaft. Weld the bottom washer about ¾" from the end of the shaft so that end of shaft sticking through the washer will ride on the bottom of the can and prevent lower blades from scraping. The upper washer is welded about 2" above the lower



No Gaps in the BCA clutch-bearing line

Whatever clutch-release bearing is called for, call on BCA for the best.

BCA has them for virtually every clutch you'll ever come across—and they deliver up to 3 times the normal life of 70,000-80,000 declutchings. That's because, as a long-time automotive specialist, BCA builds them to extremely rigid engineering standards. They're designed for easy installation to save you time in the shop and for longer life to eliminate profit-robbing breakdowns.

In fact, *wherever* ball bearings are used—clutches, wheels, generators, transmissions, differentials—there's a BCA bearing to do the job better. So call your BCA bearing jobber today and let him give you immediate delivery from a *complete* line.

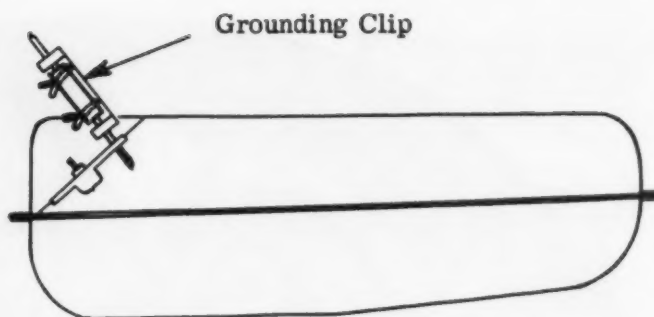
BCA BALL BEARINGS

FEDERAL-MOGUL SERVICE

Division of Federal-Mogul-Bower Bearings, Inc. • Detroit 13, Michigan

one. Higher welding might cause it to be ineffective in a partially filled can.

Holding the long part of shank in the left hand, bend or twist each section of lower washer with pliers approximately $\frac{1}{4}$ " to the left or counterclockwise. This gives the lower washer a picking-up effect when used in a drill. The upper washer should be twisted in the opposite direction. This pitches the point downward.—William Horrell, 824 Evelyn Avenue, Louisville 15, Kentucky.



Grounding Clip

CHAMPION

with EXCLUSIVE OIL MONITOR

Prevents costly "down time" . . . guards your equipment against losses by automatically disconnecting the compressor when the oil level drops below normal operating range.

Champion Air Compressors are available in single and two stage models ranging from $\frac{1}{4}$ to 20 Hp.

SEE OUR CATALOG IN SWEET'S
OR WRITE FOR COPY

compressors/pumps/accessories



Representatives in Principal Cities

CHAMPION
PNEUMATIC
MACHINERY CO.

PRINCETON 3, ILLINOIS

COMPRESSORS

Plymouth Provides Clip To Ground Tank, Body

A FUEL tank grounding clip, part No. 2258412, that provides a positive electrical ground between the fuel gauge and the car body is now used on all 1961 Plymouth cars, according to a Plymouth service bulletin.

The clip is attached to the fuel tank outlet tube and the fuel supply tube, bridging the rubber hose connector, as shown in sketch.

When an erratic fuel gauge is encountered on a 1960 or 1961 Plymouth or De Soto car, temporarily install a ground wire between the fuel tank and car body. If this procedure stabilizes the fuel gauge reading, install fuel tank grounding clip, part No. 2258412. Make certain clip mounting areas are free of any undercoating or foreign material to insure a good electrical contact.

Remedying Deck Lid On Ford Fairlanes

ON SOME 1960 Fairlane and Fairlane 500 Ford cars, the deck lid opens too far, thereby hitting the rear view mirror window reveal molding.

To eliminate this condition, we install a rubber bumper in the curve of the deck lid hinge arm to serve as a stop before the deck lid hits. This works better if bumper is put on both deck lid hinges, as you can easily observe.—James D. Martin, Service Manager, Jack Hughes Motors, 100 E. San Antonio, San Marcos, Texas.

Virginia Beach Elects Adams

Rhae Adams of Rhae Adams Motors has been elected president of the Virginia Beach (Va.) Automobile Dealers Association. Other officers are Murray Malbon of Malbon Motor Co., vice president, and Gene S. Meekins of Meekins Pontiac, secretary-treasurer.



DEAD

■ This battery looked new. It even powered the car lights and horn up until the last minute. Then it died . . . prematurely. Battery "sulfation" set in . . . plates hardened . . . chemical reaction stopped.

■ Chances are it wasn't a National battery. National's patented Silver-Cobalt, Sealed Charged construction provides 300% greater resistance to overcharge (number 1 battery killer) and more resistance to undercharge

(number 2 battery killer). National batteries stay stronger, longer . . . do not die before their time.

■ These are advantages for the motorist. For dealers National has a profit structure that can really make battery money. Contact your National distributor for the complete story . . . today.



AUTOMOTIVE DIVISION
GOULD-NATIONAL
 BATTERIES, INC.
 St. Paul 1, Minnesota



Filled at the Factory • Sealed Charged at the Factory • Factory Fresh Performance

is our business **HOUSER** ENGINEERING & MFG., INC.
BLUFFTON, INDIANA

TENSION valve spring

	Vehicles in Fatal Accidents	Per Cent	Vehicles in Non-Fatal Accidents	Per Cent
In apparently good condition	44,790	94.1	3,318,140	95.9
Brake defective	810	1.7	79,580	2.3
Steering defective	100	.2	6,920	.2
One or two lights out	140	.3	6,920	.2
Taillight out or obscured	100	.2	3,460	.1
Other defects in equipment	1,140	2.4	31,140	.9
Puncture or blowout	520	1.1	13,840	.4
TOTAL	47,600	100.0	3,460,000	100.0

This shows the condition of vehicles involved in accidents in 1960.

Six of Every 100 Vehicles Are Found Faulty in Fatal Crashes

WHILE motor vehicles in apparently good condition continued last year to outstrip those in other categories, 2,810 vehicles (5.9% of total) not so fortunate were involved in fatal accidents and 141,860 (4.1%) were involved in non-fatal accidents.

"Deadly Reckoning," the 1961 book of street and highway accident data published by The Travelers Insurance Companies, Hartford, Conn., also showed:

38,000 deaths last year from motor vehicle operations were 400 above the 1959 total.

The 3,078,000 injuries were higher by 208,000 than in '59.

The 263,100 pedestrian casualties were five per cent higher.

Almost 40% of the total deaths—

14,900—occurred on weekends.

More than 34% of the drivers involved in fatal accidents were under 35 or over 65 years of age.

Almost 84% of the casualties occurred when the weather was quite clear.

Saturday was the most dangerous day of the week.

Most deaths occurred between 1 and 6 a.m.

Said the publication:

"The most significant figures in the 1960 booklet concern injuries rather than deaths. In 1960 deaths increased by 400 over the previous year, an increase of one per cent. Injuries, however, increased by 208% over 1959, an increase of more than seven per cent."





Mississippi partners

Boost Bank Balance

Selling 80 Gates Belts Monthly

Robert Divine and Harry Lefoldt, partners in Divine's Maywood Shell
740 North President, Jackson, Mississippi...

"Although we've been in business only 2½ years, we quickly learned to carry only high profit items. Gates Belts and Hose certainly top this list. We average 80 belt sales a month by using the Gates sales aids furnished us.

"Gates Sales Tools like the Dial-Finder, Catalogs and Wall Charts make it quick and easy to find and install the right belt. The Mystery Car Campaign keeps all of us on our toes looking for bad belts. We find that Gates V-Belts and Hose are profit partners in our partnership—they help us bank extra dollars every month."

"Go" Gates for Profit... Call your Gates Jobber TODAY!

Your Gates Supplier will have a factory-trained Gates Representative install attractive belt and hose displays, clean up your belt and hose stocks, and supply you with complete set of station-tested Gates Sales Aids. He'll also help you get your present stock in shape for top profits—and you won't lose a penny!



The Gates Rubber Co., Denver, Colo.

Gates
50th
Year

World's Largest Maker of V-Belts

Gates Vulco V-Belts and Hose

TPA 506

California Garageman Tells Tennesseans:

Stations Are Garage's Big Challenge

THE greatest competition we face today comes from the specialty shop, the discount house and the service station, and in my opinion, the greatest challenge is offered by the service station.

In the first place, they have the greatest customer contact, and because major oil companies have great land control, they are able to secure the finest of locations, and because of their tremendous buying power, are able to purchase directly



Excerpts from an address before the annual convention of the Automotive Wholesalers Association of Tennessee at Memphis last month. The speaker is the national delegate to the Independent Garage Owners of America from California, whose state group numbers approximately 1,000 garagemen and 300 affiliated members. He operates a garage at Long Beach, part of metropolitan Los Angeles.

from the factory and bypass both warehouses and wholesalers.

Recent developments certainly indicate these trends.

As an example, at the recent convention, one of the speakers, a vice president for a large equipment manufacturer, told those assembled that jobbers could not hope to sell equipment to oil companies for new installations as they were purchasing directly from the manufacturer.

A few weeks ago the Tidewater Oil Co. announced they were going to place all of their service stations in the brake repair business and that all equipment would be purchased directly from the Barrett Equipment Co. and all lining directly

By **HENRY SORENSON**

Past President
Independent Garage Owners of
California

from the Laher Co.

This, of course, means no business

for the jobber and greater competition for the garageman. Add these to the many TBA deals being made by oil companies and parts manufacturers and they all add up to a great competitive force for both jobber and garage owner.

The specialty shop has certainly

WHAT CAN YOU TELL CAR OWNERS WHO COMPLAIN

that their shock absorbers
wear out too fast?



made inroads in the car service business recently too, for they need little skilled labor and many work on price alone.

I suppose we are all familiar with the great brake chain stores, shock absorbers, seat covers, mufflers, engine exchange and the rest.

Too many lure the customer with a ridiculously low price and then use high-pressure selling methods after he is in their place of business, and it is surprising how many car owners fall for this trick.

They forget that you do not pay

as you enter, but only as you leave.

Last, but far from least, is the rapid growth during the past few years of the discount house. These so-called business houses are certainly growing like bad weeds everywhere and they sell just about every fast-moving automotive part that manufacturers will make available to them and they eliminate both wholesaler and garage owner from the small parts business.

It isn't a bit unusual to have a car owner drive in today requesting a tune-up with all the necessary

parts in the front seat, purchased at his favorite discount store for less than the garage owner can purchase them from his wholesaler.

Of course, he also needs his oil and filter changed which he has in the trunk, purchased from the same source.

I have mentioned only some of those bent on capturing the sales of automotive parts and service. There are many more, of course. Mail order houses, chain stores and super-markets are all getting their share of this business.

Independent garage owners are well aware of the need to sell through public acceptance. To be sure, as a group we cannot compete with our competition in public relations and advertising programs. However, through I.G.O. we can accomplish a great deal more than we can as individuals.

Realizing the tremendous need for keeping our name in the public eye, I.G.O. of California has, this year, made public relations one of its top budget programs.

Push Litter Bag Campaign

We have initiated litter bag programs, giving away more than 100,000 to date, set up highway sign board projects as well as signs for pick-up truck use.

More than 500 of these signs are now on display in California and we will continually increase this number.

We have provided local units with radio tapes which they may use on local stations telling the public to "look for the sign of I.G.O. for safe, dependable automotive repair."

We have published a pamphlet entitled "What to Do If Your Car Is Involved in An Accident," which tells the motorist his rights and duties under California law when he has an accident. 30,000 of these brochures have been distributed to date.

These have become so popular, in fact, that some insurance agents are mailing them to their customers.

Our final public relations project for our current year, which ends in June, is to be the printing of our I.G.O. of California roster. We feel that this program is one which will really be of benefit to our membership and the car owner, for in addition to identifying each member, it will carry timely tips and information for the motorist.

The inside cover will have space for the I.G.O. member giving the roster to place his customer's name, introducing him to other I.G.O. members throughout California so that he will seek out the red, white

You don't want to tell him all shocks are about the same, because it just isn't so. You can *show* him that a MOOG shock is totally different... all the way through.

THE FLUID'S ON THE FRAME where it gets the same smooth ride as the passengers, instead of the severe shaking of the axle. Minimizes fluid agitation and fluid foaming, even at today's higher speeds! That's why MOOG Shocks never fade, never weaken when the going's rough.

SAFETY RESERVOIR locks in air bubbles, prevents them from mixing with shock absorber fluid to assure steady performance throughout today's longer trips.

EXTRA-LARGE OPERATING BORE in both MOOG shocks... a full 1/4" larger than competitively-priced shocks. This means lower pressure and less wear... extra shock mileage for today's driving.

TWIN SEALS provide double protection against fluid loss.

TRIPLE-WELDED MOUNTS are 50% stronger than conventional welds.

You can prove that no other shock will take him farther, faster, safer and more comfortably. *Tell* your customer there is *one* better shock and sell him Moog. You'll be glad you did.

Licensed by DeCarbon

TWO GREAT NEW MOOG SHOCKS

COMMANDER

(standard)

SHOCK-BUOY

(premium duty)



FREE SILVER-PLATED DINNERWARE with each MOOG Shock Assortment #44. Build up a complete service. Contact your MOOG jobber or distributor today!

MOOG
UNDER-CAR PARTS

MOOG INDUSTRIES, INC. • St. Louis 33, Mo.
MOOG MEANS MORE UNDER-CAR BUSINESS

A-6



FLEET
AIR-POWERED
END LIFT

Quick, easy, safe lifting

Easiest to move. Big 10" Semi-pneumatic rubber wheels


Use shop air supply to speed up lifting. Easy one-hand operation.

Your NAPA Jobber is a good man to know. He stocks the complete line of Fleet lifting equipment.

EDGEWATER AUTOMOTIVE DIV.
St. Joseph, Michigan

High lift attachment available for tight under-chassis work. One-hand controls.

DIESEL PEP



Diesel Pep
DIESEL FUEL CONDITIONER

- KEEPS INJECTORS CLEAN
- KEEPS FUEL SYSTEMS OPEN
- IMPROVES COMBUSTION
- REMOVES GUM AND VARNISH
- ELIMINATES WAX AND SLUDGE
- REDUCES ENGINE WEAR
- MINIMIZES SMOKING

Pep up sales with Diesel Pep!
Diesel Pep keeps injectors, screens, filters and fuel pumps clean—improves combustion, disperses water, keeps fuel lines open.
Diesel Pep prevents rust and acid formation, removes gum and varnish, eliminates wax and sludge—reduces engine wear, minimizes smoking! Sold through automotive jobbers and their distributors.

SPC SPRAY PRODUCTS CORPORATION

P. O. Box 1988 • Camden 1, N.J.

and blue shield over any other service sign he sees in our state.

35,000 of these rosters are now being printed and we hope it is only the beginning of a program which will acquaint the public with I.G.O. members and cause him to place his trust in a group of businessmen dedicated to first class *personal* service for his car.

In addition to the distribution through our California shops, 5,000 of these rosters will be made available to other I.G.O.A. units in the United States. Some will be mailed also to auto clubs, government agencies and other interested California and national groups. This roster is to be a permanent I.G.O. of California activity.

We of I.G.O.A. are convinced that we have one thing to sell which is more important to the car owner than anything else, that is, *personalized* service.

It is our most potent selling force and we only hope that someday our campaign can be conducted on a nation-wide basis, for when it is, we will be insuring the success of our entire industry.

Women's Clubs Launch Seat Belt Crusade

A NATION-WIDE "Women's Crusade for Seat Belts" was launched recently at a reception in Washington, D.C., honoring Mrs. E. Lee Ozborn, president of the General Federation of Women's Clubs.

The Auto Industries Highway Safety Committee is co-sponsor of the crusade, of which J. B. Wagstaff,

a Chrysler Corp. vice president, is chairman. The crusade will be conducted through the remainder of the year by the federation's 16,000 affiliated clubs. The objective is—"A Million and One in '61!"

"Numerous studies of auto crash injury cases," Mrs. Ozborn said, "have proved beyond doubt that the regular use of automobile seat belts can materially reduce the possibilities of severe injury, disfigurement and death. Club members will now enter into another of their life-saving efforts."

Other organizations and groups co-operating are the American Medical Association, Automotive Safety Foundation, National Automobile Dealers Association, National Safety Council, National Tire Dealers and Retreaders Association, the President's Committee for Traffic Safety, the Accident Prevention Division of the Public Health Service and automobile and tire manufacturers.

"Crusade Cards," provided through courtesy of NADA, will be used by the federation's clubs. A section of the cards, to be returned to headquarters in Washington, D. C., after seat belts are installed, will be tabulated to determine club winners. Three types of awards will be made: a certificate of achievement for each club in which all members had seat belts installed in their cars; a state award for the state in each federation region which has the highest percentage of clubs with 100% participation, and a national award for the club conducting the most outstanding community activity in support of the crusade.

Members of the National Automobile Dealers Association Task Force Committee who met recently in South Bend, Ind., with Sherwood H. Egbert, Studebaker-Packard Corp. president (seated right), and Lewis E. Minkel, vice president of marketing (standing center), are (l. to r.): Henry D. Schleeter, Jr., of Houston, Texas, Studebaker dealer representative; James C. Moore, NADA executive vice president, and Herbert L. Galles, Jr., of Albuquerque, N. M., Task Force chairman. The committee is determining ways to increase dealer profits and revitalize the franchise system. Egbert told the group that Studebaker has established a dealer business management department to assist its dealers in their business procedures.



Van Norman 570 ROTARY BROACH

Earns EXTRA PROFITS for you
because it's extra fast



One set-up . . . one pass . . . one cut. That's all it takes to turn out precision machining of cylinder heads, engine blocks and other surfaces with the 570 Rotary Broach!

Look at the many ways it cuts your costs, pays you bigger profits with less work:

- Set-up time about 60 seconds.
- Resurfaces average cylinder head in less than 8 minutes.
- Micrometer controlled stock removal.

- Requires no attention from operator once automatic traverse feed is set in motion.

- Less floor space needed than with any other machine approximating its capacity.

- Tool-sharpening fixture is available for resharpening cutters. Not necessary to return cutters to factory.

Learn all the benefits in having this extra-profit-maker in your shop. Contact Van Norman now.

4130

QUALITY IS THE REASON—IT PAYS TO VAN NORMANIZE

VAN NORMAN

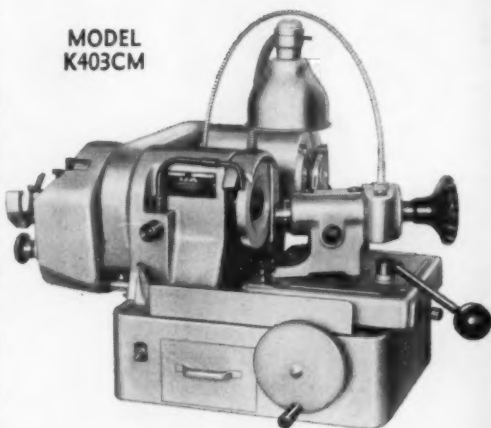
Springfield 7, Massachusetts

A DIVISION OF VAN NORMAN INDUSTRIES, INC.



IF YOU WANT A VALVE REFACER

MODEL
K403CM



That will operate continuously for ten, fifteen or twenty years without a major overhaul, then there is only one machine that you can buy that will fulfill this requirement, that is the K. O. Lee "Lifetime Refacer".

features:

- ★ No shafts, bearings or belts in base to wear or give trouble.
- ★ V-table ways, found only on precision machined tools, instead of round shafts with line contact.
- ★ Trouble-free alternating current motor instead of high speed Universal motors with brushes.
- ★ 5" grinding wheel and ball bearing spindle shaft with automatic take-up for wear.
- ★ Smooth worm-driven workhead that assures chatter-free grind on valves.
- ★ Double-end collet chuck that retains its accuracy after many years of constant use.
- ★ Lever for fast, convenient movement of valve across grinding wheel instead of slow crank and feed screw.

WRITE FOR COMPLETE LITERATURE

K.O. Lee Co.

ABERDEEN, SOUTH DAKOTA

Missourians Lash Out At High Inventories

A RESOLUTION expressing hope that the car manufacturers will not in 1961 "again resort to coercive inventory build-ups and premature show and drive and advance delivery of '62 models" has been adopted by directors of the Missouri Automobile Dealers' Association.

The directors cited as "a matter of common knowledge" that the business condition of automobile dealers is at a low ebb as evidenced by a high dealership mortality and an average return of one-half of one per cent of sales. The condition, they added, is more pronounced than is necessary and "has resulted in no small degree from the fact that the automobile manufacturers have encouraged and, in many cases, compelled dealers to build up and maintain completely illogical new-car inventories."

Other factors brought out included the following:

"Whereas, the annual build-out period is just around the corner for the 1961 production year, and

"Whereas, if there is a repetition by the manufacturers of their coercive tactics of last year to compel unrealistic inventory build-ups of carryovers out of all proportion to the demand and requirements of the public and the dealer body, not to mention the bungled handling of 'Announcement Day,' there will be a further attrition in dealerships."

The group further recorded its wholehearted support of the National Automobile Dealers Association Task Force in its efforts to obtain evidence of the dealers' economic condition to lay before the manufacturers and that a copy of the resolution be sent to the membership, to all manufacturers and to any information source the officers selected to the end that the manufacturers may desist from the condemned practices and the dealers may be alerted to resist, if necessary, coercive pressures by the manufacturers.

Greater Miami Names Grentner President

NEW president of the Greater Miami (Fla.) Automobile Dealers Association is Charles E. Grentner, Jr., of Grentner Bros. (Simca).

First and second vice-presidents, respectively, are P. J. Schaefer of Gables Lincoln-Mercury, Inc., Coral Gables, and R. F. Fogarty of Don Allen Chevrolet, Inc. T. B. McGahey, Jr., of T. B. McGahey Motors, Inc. (Chrysler), is treasurer.

Directors are James H. Walker of Hunt Truck Sales & Service, Inc., Frank Watts of Waco International Salon, Jack Zeder of Munroe-Zeder, Inc., Ben Tutan of Tutan Motors, Inc., Sam Luby, Jr., of Luby Chevrolet Co., and Bill Austin of Austin Ford, Inc. Honorary director is Frank S. Edelen, Sr., of Frank Edelen Buick Co.

Bordinat Directs Ford Styling

Eugene Bordinat, Jr., has been elected a vice president of Ford Motor Co., succeeding George W. Walker, who has reached normal retirement age but will continue with the company as a styling advisor. Bordinat, who joined Ford in 1947 as supervisor of advanced styling, had been chief stylist of the Lincoln-Mercury studio since February 1958.

86% of All Motorists Prefer Car Travel

THE AUTOMOBILE is the preferred means of travel for 86% of all motorists, according to Malcolm P. Murdock, vice president in charge of sales for the Ethyl Corp.

Speaking before the midyear meeting of the Marketing Division of the American Petroleum Institute at Miami Beach, Murdock said motorists find a car more pleasant and relaxing than any form of public transportation.

Highlights of a nationwide survey of motorists' attitudes recently completed by Ethyl Corp. were presented by Murdock and revealed that the majority of drivers actively enjoy driving and derive real satisfaction out of it. Women, he said, show an even stronger preference for driving than do men, even though they do far less driving than their husbands.

"Nearly three-quarters of the drivers interviewed," Murdock said, "say there still is adventure in driving a car, in going to new places and in seeing new things." According to the survey, 68% of all motorists look favorably on taking their families out for a Sunday drive, and they consider it a treat for their children. Parents strongly favor sightseeing trips to interesting and historical places, and believe these trips have great educational value for their children.

By far the majority of trips taken range from one-day to weekend excursions, Murdock said. Most motorists do not care to be on the road for more than a few days at a time.

AEA Receives Merit Award From Chamber of Commerce

AN AWARD of Merit was presented the Automotive Electric Association by the Chamber of Commerce of the United States at its 49th annual meeting in Washington, D.C.

President Arthur "Red" Motley presented the award to J. Howard Reed, executive secretary, and Ray B. Roberts of Washington, D.C., AEA director, at a special session during the chamber's meeting. The award was based on AEA's achievements in providing its members with business management aids, catalogs, technical service information and automotive educational and training programs.

Hood Dies in Laurinburg, N. C.

J. B. Hood, a former Ford dealer in Laurinburg, N.C., died there suddenly last month. Hood moved from Laurinburg to Columbia, S.C., in 1957 and opened an automobile agency there, later moving to Charlotte and finally settling in Lumberton some months ago. He was mayor of Laurinburg from 1951 to 1953.

Ray Dies in Alabama

W. Herbert Ray, president of Ray Auto Co., Huntsville, Ala., died last month after a lengthy illness. He was a past president of the Automobile Dealers Association of Alabama.

**If You Can Use Seven Dollars,
Maybe You'd Better Turn to Page 121.**

GOJER, INC. Announces Its

"STOP WASTE PROGRAM"

**CARELESS WASH-UP
PROCEDURES ARE
COSTING YOU MONEY!**

A pair of dirty hands with free access to an open can of soap may well be the reason your company handcleaning bill is such a costly item. Provide an effective way of controlling the amount of soap being wasted by your employees, and you'll prevent the greatest part of your handcleaning dollar from being washed down the drain.



**GO-JO'S HEAVY DUTY
DISPENSER CONTROLS
WASH-UPS... SAVES
YOU MONEY!**

Designed to eliminate waste, the Go-Jo Heavy Duty Dispenser delivers just the right amount of Go-Jo to get even the grimmest hands spotlessly clean. Go-Jo Creme Hand Cleaner is a concentrated formula containing GT-7 for dermatitis protection, plus soothing emollients to prevent chapping. When used in the Heavy Duty Dispenser, it provides four times as many clean-ups as "hand scoop" methods.

Pat. No. RE. 24312



The Go-Jo jobber serving your area will be happy to show you how to cut as much as 75% off your handcleaning expenditures. Write us today.

GOJER, INC.

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MANUFACTURERS OF *gojo* PRODUCTS

B-6

FLEET HYDRAULIC END LIFT



Large 10" semi-pneumatic rubber wheels.

Lifts both front or both rear wheels of all cars and light trucks, quickly, easily.



Your NAPA Jobber is a good man to know. See him for the complete line of Fleet lifting equipment.

EDGEWATER AUTOMOTIVE DIV.
St. Joseph, Michigan

Transmission adapter and high lift attachment available.

NEW FROM PICK!

A Full Line of Hydraulic
BRAKE PARTS

SPECIAL OFFER!



Two money saving deals on Pick Wheel Cylinder Repair Kits

Two Wheel Cylinder Repair Kit assortments to choose from. Each assortment contains coupons worth \$1.00 credit against purchase of Pick Exchange Shoes.

DEAL #4—Contains 1/2 dozen each of the 8 most popular kits (48 kits) and 4 \$1.00 coupons.

DEAL #9—Contains 1 dozen each of the 8 most popular kits (96 kits) and 9 \$1.00 coupons.

ASK YOUR PICK JOBBER

Pick
MANUFACTURING CO.
AUTOMOTIVE DIVISION
WEST BEND, WISCONSIN



Georgia Station Leader Tells Tennesseans:

Can Double Non-Gas Sales

By THOMAS J. FOUNTAIN, JR.

First Vice President
National Congress of Petroleum Retailers

WE ARE willing to work for the free enterprise system—and we are also determined to make sure that the free enterprise system has a chance to work for us—that it is not corrupted with coercion and repression. We believe that practices which drag down our whole economy with monopolistic restraint must be corrected.

It is in the light of this objective and these principles that our two national organizations, the National Congress of Petroleum Retailers and the Automotive Service Industry Association, nine months ago established the Economic Freedom Council, on which I am privileged to serve as NCPR representative.

The existence of TBA pressure and the seriousness of its effects have been confirmed over and over in congressional hearings and anti-trust enforcement proceedings—most recently last month in the landmark decisions by the Federal Trade Commission tire override commission cases against two major oil companies and two major tire manufacturers.

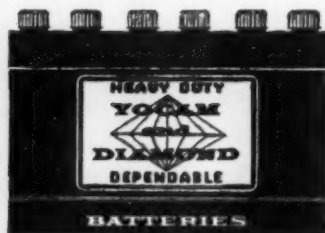
In both of these cases in which FTC reached a final decision, the commission's decision points out that the oil companies involved had promulgated company policies asserting the freedom of their dealers to purchase competitive TBA products—yet in both of those cases the

decision by the full commission confirmed the findings of the hearing examiner that both oil companies involved had, in fact, used coercive measures in order to pile up override commissions on their dealers' purchases.

The NCPR-ASIA Freedom Council has one basic objective—to secure more real economic freedom in the service station marketplace. There is a shocking gap—sometimes almost a chasm—between the legal rights which service station operators are supposed to have as independent businessmen under the anti-trust laws and the rights which service station operators feel free to exercise in practice. It is our job to close that gap . . . to do the things which are necessary step by step, and to make the orderly sustained efforts which are required for real economic freedom to become a reality in practice as well as theory in the service station marketplace . . .

Just how costly the blight of TBA pressure has been to automotive wholesalers, service station operators and the motoring public is hard to visualize or realize. The magnitude of it is so great that it can only be approximately measured, but there is a yardstick which can be realistically applied. The amount of loss which has been suffered can be grasped when you calculate the benefits which will be realized by

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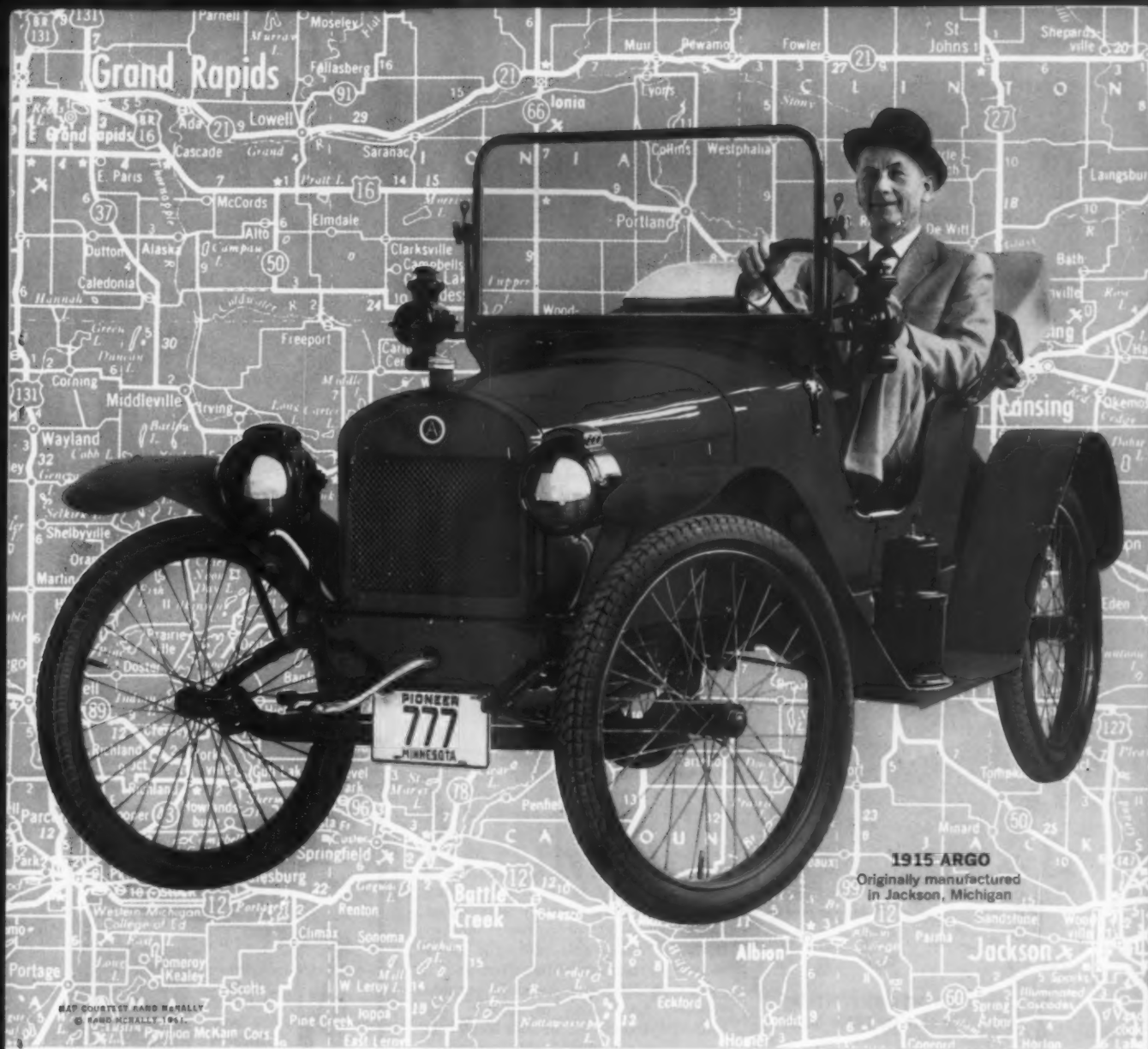
ASK YOUR DEALER OR JOBBER

**WE OUTSELL . . . BECAUSE
WE OUT SERVE**

**DIESEL
MARINE
INDUSTRIAL
AIRCRAFT
MOTORCYCLE
COMMERCIAL
AUTOMOTIVE**

YOCAM BATTERIES, INC.

TAMPA - MIAMI - JACKSONVILLE
PENSACOLA - ORLANDO, FLA.
MOBILE, ALA. - COLUMBUS, GA.
COLUMBIA, S. C.



1915 ARGO

Originally manufactured
in Jackson, Michigan

New car or antique, the fastest way to turn out top-notch two-tone or overall paint jobs is with "SCOTCH" Brand Masking Tape. It goes on easier and sticks at a touch. Excellent adhesive qualities prevent paint from creeping under, give a sharp, clean separation every time. And you can depend on "SCOTCH" Brand Masking Tape to strip off clean and leave no jagged edge or messy adhesive residue. Order a stock now from your 3M supplier for better painting results.

**3M AUTOMOTIVE PRODUCTS GIVE THE
RIGHT START TO A PERFECT FINISH.**

"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 6, MINN.

MINNESOTA MINING AND MANUFACTURING COMPANY
...WHERE RESEARCH IS THE KEY TO TOMORROW



YOU'RE PROTECTED
3 WAYS WITH
**NATIONAL
BRAKE BLOCK**



- 1** Perfect contact of lining to shoe for 100% bond.
- 2** Tested for bond and shock strength.
- 3** Precision ground for perfect fit into brake drum.

The National brake shoe exchange program means superior bonding techniques, specialized skills and equipment — all resulting in safer braking for your customers, greater sales, bigger profits for you.

National linings are supplied grooved, plain and for power brakes through local distributors. Write today for full details, and the promotional aids designed to help you sell more of National's premium linings at a popular price.

NATIONAL
BRAKE BLOCK CORPORATION
SINCE 1919
37-17 57th Street, Woodside 77, N. Y.



Excerpts from an address before the annual convention of the Automotive Wholesalers Association of Tennessee at Memphis last month. The speaker operates a service station at Decatur, on Atlanta's outskirts, and is a past president of the Georgia Association of Petroleum Retailers, composed of 3,400 members—reportedly the largest in membership of any state automotive group in the nation. The National Congress of Petroleum Retailers' membership aggregates 40,000.

service station operators, automotive wholesalers and the motoring public through the elimination of this blight—when the basic principles of economic freedom which are the law of the United States become realities of economic life in our business.

Here is what is involved in this issue from the economic standpoint alone—what our objective means in terms of measurable economic gains to every group which is affected:

During 1960 the nation's service stations had sales of about 17½ billion dollars. 75% of this total was gasoline—and only 25% was other automotive products and services.

Of the 17½ billion dollars of service station sales during 1960, only a little more than 3 billion dollars were in automotive products other than gasoline. That breakdown sheds a very penetrating light on what our objectives in the Freedom Council mean, first to service station operators and then to automotive wholesalers—because in this economic pattern, your business depends upon our business.

Increases in service station sales in the current year and in the year ahead cannot come to any appreciable extent from gasoline—and will have to come from other automotive products, the products you sell and which service station operators must sell more of to improve their sales

and profit picture in 1961 and 1962.

In spite of efforts by the American Petroleum Institute to stimulate gasoline demand, the projected increase in gasoline sales for 1961 and '62 is only about two per cent annually.

What a different prospect exists when we come to sales of products other than gasoline. There, instead of everything having been done to promote sales, we have a market where many policies have been maintained which repress sales, where denial of freedom to purchase competing TBA merchandise has prevented service station operators from meeting market demand.

Here are some basic facts:

1.—The service station industry has the most modern and advanced retailing facilities developed by any industry in this country to meet the trend towards convenient drive-in retailing.

2.—The nation's dealer-operated service stations are not only the best kind of retailing facilities for selling gasoline—they are also the best, most convenient and most efficient place to sell almost everything else which goes into an automobile, plus related merchandise besides.

C-6

**FLEET SHOP
CRANES**

Make heavy work easier, faster, safer.



½ ton —
¾ ton —
1 ton —
2 ton capacities

Move these handy cranes anywhere in the shop.

Save time, money and backaches in lifting and moving heavy machinery, motors, crates and boxes. Rugged all steel construction for years of service.

Truck mounted cranes, ½ and 1 ton hydraulic and electric-hydraulic



Your NAPA Jobber is a good man to know.

EDGEWATER AUTOMOTIVE DIV.
St. Joseph, Michigan



"SEE-FOR-YOURSELF" SELLING

with John BEAN ALIGNMENT INDICATOR

There's a difference between telling customers they need wheel alignment and *selling* them on it. The difference is a new John Bean Alignment Indicator. You can easily show Mr. Customer a direct reading of side drag in feet-per-mile by having him drive his car over the indicator. Self-contained unit requires no pipes or wires, gives fast readings under actual road conditions with readings on both sides of the indicator tower. Use it to sell wheel alignment service and to check completed alignment jobs. Helps sell more tires, too!

you don't have wheel alignment?

Then, you're missing a booming service business. Two out of three cars need alignment. Better check your John Bean jobber or write for catalogs on John Bean alignment equipment. Models for every operation, to meet any budget or space limitations.

free catalog

Ask your John Bean jobber or write for free Catalog L-1714 (Special Service Station Issue) with wheel alignment and balancing equipment, car washers, alignment indicator, tools and accessories.



John
BEAN®

DIVISION OF
FOOD MACHINERY AND CHEMICAL CORPORATION
LANSING, MICHIGAN



3.—The modern dealer-operated service station, to realize its sales and profit potential, in 1961 and in the decade ahead, must fulfill the opportunity afforded by its strategic location, convenient facilities and frequent contact with motorists to become the primary point of sale—not just for gasoline—but for everything which goes into automobiles.

That's where our increased business is coming from. That's where your increased business is coming from.

The realization of economic freedom in the service station marketplace and dealers' use of this freedom to vastly increase their non-gasoline sales offers both dealers and automotive wholesalers the broadest opportunity for increased business and profit which exists anywhere on the industry's business horizon today.

With respect to the products which we service station operators sell

and are able to sell other than gasoline:

Just by selling the motorists the products which they really want to buy from us and the added products which we can handle and install most efficiently—and that includes almost all of the products which go into an automobile plus half a dozen important related lines of merchandise—we can double our average annual 3 billion dollars of non-gasoline merchandise sales during the next three years.

But this is true provided, and only provided we are able to buy these products at competitive prices free from any interference or restraint from our gasoline supplying companies as to products handled or methods of doing business.

This tremendous increase in sales—with even greater proportionate increase in profit opportunities—can be attained if there is effective legal protection for the rights which the

law says service station operators have—and if service station operators use these business rights in conducting their businesses.

Yet this need not injure major oil companies and should benefit them in various ways if they will accept this transformation of the service station industry into a broader, freer automotive marketplace.

Economic freedom is not a concept by which service station operators will automatically or necessarily give their non-gasoline business to the automotive wholesalers exclusively. Rather, it is a concept by which service station dealers will give their business to whatever suppliers and wholesalers earn that business by selling the products motorists need and desire—by selling at competitive prices and by carrying the stocks and giving the service which retailers need.

If major oil companies respect their dealers' freedom to purchase competitive TBA and will compete for their dealers' TBA business with competitive prices and service, they can participate in the increased business which their dealers will do. And even more important, there will be a strengthening of the oil companies' gasoline distribution system through service stations as service station dealers become prosperous and successful retailers.

Bland Dies in Edgefield, S.C.

Jules P. Bland, Sr., former owner of Bland Chevrolet Co., Johnston, S.C., died in Edgefield recently. He was a former director of the South Carolina Automobile Dealers Association.

Payne Dies in Tennessee

Van A. Payne of Payne Brothers Motor Co., Springfield, Tenn., died recently.



The line that insures your profit dollars with guaranteed performance

BLACKSTONE

PRECISION ENGINEERED
AUTOMOTIVE PRODUCTS

- Fuel Pumps and Repair Parts
- Shock Absorbers
- Voltage Regulators
- Oil Pouring Spouts
- Compasses





**BLACKSTONE
MANUFACTURING
Co., INC.**

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NEW Bishman

ELECTRIC-AIR POWER Tire Changer

Trade in your old tire changer for a NEW BISHMAN with . . .

AIR POWER Double Bead Breakers
ELECTRIC POWER Mount and Demount
BIG CAPACITY, 12" thru 17 1/2", chuck
holds wheels & rims.

SELF CONTAINED . . . EASILY PORTABLE.

One tire change a week pays for it. Ask your
Jobber or write for descriptive Bulletin 880-61

Model
880-61



Bishman Tire Changers are sold only
through Automotive Equipment Jobbers.

Bishman MFG. CO.

ROUTE 2, OSSEO, MINN.



Loosens Rusted Bolts
nuts, screws, "frozen" parts!

LIQUID WRENCH

SUPER-PENETRANT

"The mechanic's friend
. . . works in seconds"

YOUR JOBBER HAS IT!

RADIATOR SPECIALTY CO.
CHARLOTTE, N. C.



Plenty of sales lures

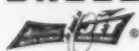


AERO-SEAL JET[®] worm drive hose clamps

Whether you sell hose clamps, or whether you use them yourself, you'll find plenty of sales appeal in AERO-SEAL Jets. Compared with any other worm drive clamp, AERO-SEALS offer advantages in material, workmanship, and design. The patented JET feature permits almost instantaneous installation, yet the clamps can't work loose or be forced apart. The patented band slots are shaped and angled to prevent binding. A patented interlock of saddle and band is more secure than spot welding. No burrs or sharp edges, because AERO-SEALS are finished to aviation standards. Bands and saddles are 302-18-8 stainless steel. All stainless also available.

AERO-SEALS come in diameters from 7/16" to 15 feet to solve a multitude of fastening requirements. Don't accept less. Specify AERO-SEALS.

BREEZE CORPORATIONS, INC.

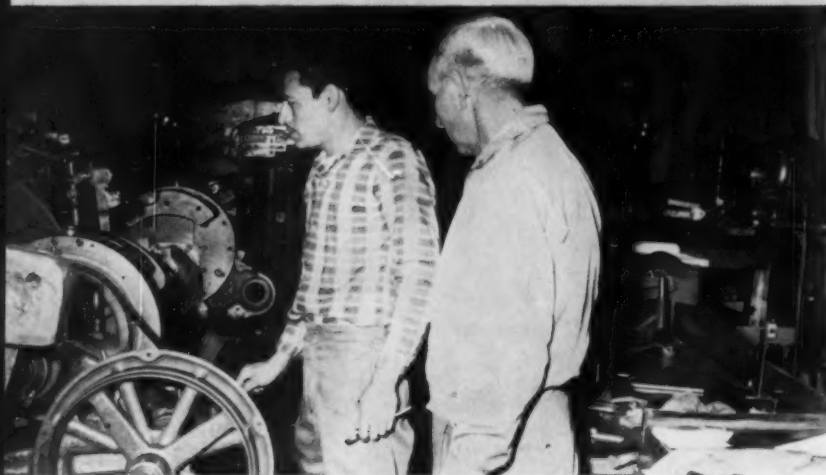


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SOUTHERN JOBBERS and FACTORY MEN



Salesman E. J. Jones watches a mechanic at work in the machine shop and becomes more familiar with the shop's services. This in turn helps him to sell more machine shop service.

Outside Salesmen with Inside Knowhow

By RUEL McDANIEL

IT IS easy for the automotive equipment and supply salesman to forget the part the machine shop can and does play in the over-all operation of the jobbing business, unless something is done to keep him reminded of the shop and its services.

Having recognized this a long time ago, Bob Russell, general manager of C. E. Russell, pioneer automotive jobber of Corpus Christi, Texas, set up a continuing program to train outside salesmen not only to an awareness of the machine shop and its services but to remind them to sell the shop's services as well.

As a result, the three outside salesmen sell the machine shop as consistently as they push equipment and supplies.

The men work on a commission basis, against a flat weekly drawing account, but in spite of this compensation arrangement, each man spends each Saturday morning at the store

and shop, learning machine shop routine and becoming more familiar with the stock, more particularly the parts department. It is understood that this is a part of their job and the men willingly do it, even though they make nothing directly as a result.

"Because they can see that the plan helps them to make more money during the five days they are outside selling, they not only are willing but glad to devote Saturday morning in this manner," Russell declared.

They divide their time between the parts counter and the shop, which is alongside the parts department and a constant reminder to drop-in parts customers that machine shop service is available.

"By watching the men work in the shop," Russell explained, "the salesman sees exactly how specific machine jobs are performed and

consequently he can talk to customers more intelligently about machine shop work. When he watches a man grind a crankshaft, he can tell his customer exactly how the shop does it and the steps taken to make certain the job is done right. He doesn't have to talk in generalities. He knows exactly what he is talking about."

He encourages the men to move about the shop and watch as many different jobs as possible and to ask questions.

Russell requires the men to work at the parts counter so that they not only become more familiar with stocks available but with the way orders are handled.

Recently one salesman was looking for a certain item and came across some ignition testing equipment.

"I'd forgot that we had that stuff," he admitted. And he started the following week to look for prospects for the equipment. As a result, he sold two outfits during that week.

"He would have gone on overlooking this equipment, no doubt, if he had not seen it while working the parts counter Saturday," Russell said.

Saw It—Sold It

"The stuff was in his catalog, but it really didn't register until he saw it in stock and had it impressed on his mind. Many other items impress themselves on the salesmen in the same way, by their actually seeing them in stock."

The salesmen also utilize their time Saturday to bring their catalogs up-to-date, by making whatever changes and insertions are needed. Even this minor step works in conjunction with the salesman's time spent behind the parts counter. If he inserts a sheet in his catalog which shows a new item, he has a much better picture of it after having actually seen it while working in the parts department and is more likely to remember to push it the following week.

To help the outside men sell more machine shop service, Russell supplies each man with a flat rate schedule for machine shop service. He has figured out a flat rate on practically all routine shop jobs, and with a copy of the schedule in hand the salesman has little difficulty selling shop service.

The flat rate, of course, covers labor only, the salesman making it clear that whatever parts are used on the job will cost additionally.

"So, having become familiar with most routine shop jobs through



Salesman Jones works behind the counter on Saturdays, acquainting him with stock and some of the problems faced daily by the countermen.

watching the mechanics at work and asking questions, and having a flat rate price list with him, the salesman is able to sell shop service intelligently. He not only can tell the customer what the job will cost, but he also can discuss the various steps of the operation if necessary," Russell said.

A general knowledge of machine shop operation and a price list give the outside salesman the necessary background not only to sell machine shop service but to sell it in a manner that builds confidence in the mind of the customer, because he is favorably impressed with the salesman's knowledge of machine shop practices and prices.

And the salesmen like the program because it enables them to make more money per average call, since they draw a commission on machine shop labor and, of course, on parts used in jobs they sell.

Curtis Names Texas Company

Appointment of Southwest Associates as sales representatives in Texas and southern Oklahoma has been announced by Curtis Mfg. Co., Pneumatic Division, St. Louis. The Texas firm operates from two locations, with B. W. "Tex" Carpenter as manager of the Dallas office at 5027 Horseshoe Trail, and E. J. "Ed" Albright as manager at New Braunfels, Texas.

Atlanta Auto Supply Co., Atlanta, Ga., has been appointed distributor for McQuay-Norris Mfg. Co.'s parts line, according to L. C. Matthews, secretary-treasurer of the Atlanta firm.

Meggs Succeeds Father As Dallas Firm Head

R. L. MEGGS has been named president of the Meggs Co., automotive parts distributor of Dallas, Texas, succeeding his father, R. G. Meggs, who retired.

The company was formed in 1927 by the older Meggs, who was named president in 1946 when the firm was incorporated. The new president was formerly secretary-treasurer.

Kentuckian Opens Third Branch

New branch of Schaaf Auto Electric Co., Louisville, Ky., is Schaaf Auto Supply Co., Inc., situated at 10609 Dixie Highway, Valley Station, Ky., Manager W. H. Schaaf, Jr., announced. The firm also has branches at Shively and St. Matthews, Ky.



A. M. Downing of Reed-Downing, Inc., Nashville, received the Burris M. Gibbs Award at the annual convention of the Automotive Wholesalers Association of Tennessee at Memphis last month for his contributions to the industry and the association. A former president of AWAT, Downing originated the idea of the award some years ago.

Irving Air Chute Names Four

In an expansion and realignment of its sales representatives, Irving Air Chute Co.'s seat belt division has appointed Phillip Boehm of Atlanta as representative in Georgia and Florida, Chaney & Co. of Richmond for Virginia and the Carolinas, Paul Saunders of Bowling Green for Kentucky, Alabama, Mississippi and Tennessee, Paul Wilcox of Kansas City for Missouri and Kansas and Frank Russell of Dallas for Texas, Oklahoma and Louisiana.

Myers Dies in Lexington, N. C.

W. "Pop" Myers, 92, president of Myers Auto Parts Co., Lexington, N.C., died recently.

This Sanford, Fla., branch of Miller Machine Co., Orlando, is situated at 110 West Second St. Manager is Joanne Harriett and William F. "Bill" Toews is assistant manager. The store is in the process of setting up a complete machine shop, according to Henry D. Stevens, Jr., vice president.





Heading up AWAT for the new year will be these officers and directors (l. to r.): first row, Hinton Y. Crockett of Lebanon, J. E. Sugg of Winchester, Carl A. Shults of Gallatin Auto Parts, Gallatin (president), Mayford R. Bell of Knoxville (vice president), Fred Bauer, Jr., of Memphis, and A. D. Moody of Knoxville; second row, Murray J. Haber of Nashville, P. R. "Mike" Cochran of Camden (retiring president), John J. Sheehy of Memphis, T. Keith Broyles of Nashville (executive vice president), J. Matthew "Hot Shot" Nelson of Kingsport and Marvin Neal of Knoxville; back row, Harry H. Maxwell and Homer L. Brown, both of Nashville.

Tennessee Convention Draws Excess of 300

MORE than 300 persons attended the eighth annual convention of the Automotive Wholesalers Association of Tennessee at Memphis' Claridge Hotel April 30-May 2, with a full program of well-known speakers and extensive entertainment.

J. E. "Joe" Bickel, vice president—merchandising, Monroe Auto Equipment Co., Monroe, Mich., and president of the Automotive Electric Association, asserted:

"Don't let it be said that our industry died because of complacency. Let's be enthusiastic!"

He pointed out that 69% of the

people engaged in selling today were not selling prior to the stock market crash in 1929 and the depression which followed, with the result they don't know "real competitive selling."

Joseph W. Lawson, Bristol, Va., labor consultant and arbitrator, said that the desires of an employee include job security, "a safe and decent place in which to work," "considerate treatment from his supervisor," "opportunity for advancement" and "organizational atmosphere in which he can feel he is a vital part."

Other speakers included Henry Sorenson of Long Beach, Calif. (see page 128); Thomas J. Fountain, Jr., of Decatur, Ga. (see page 134); Art Wolff of National Auto Supply Co.,

East St. Louis, Ill.; Jack L. Finn of Gardner, Inc., Columbus, Ohio; W. H. Gove of Coral Gables, Fla., and Dr. Carl C. Byers of Cleveland, Ohio, the latter two giving inspirational addresses.

Nine automotive veterans staged a two-hour panel discussion.

A cruise up the Mississippi River on a stern paddle wheeler, a reception by Booster Club B-25 of Memphis and other receptions were part of the relaxing moments.

The title of Keith Broyles was changed from executive secretary to executive vice president.

Retiring President P. R. "Mike" Cochran of Camden reported that 30 new members were acquired in the past year. Membership now exceeds 160.

ASIA Releases Manual On Public Relations

TO AID wholesaler and warehouse distributor members in creating a better public and customer image of their companies, Automotive Service Industry Association has released a "Publicity and Public Relations Manual."

Sponsored by ASIA, the manual was prepared by the Automotive Advertisers Council after considerable study of needs of wholesalers and warehouse distributors.

The association also announced the availability to its members of a free personal publicity service, designed to encourage their day-by-day usage of publicity and public relations programs, under the direction of ASIA Public Relations Director Max R. Shohet. In addition, Shohet will be available to members for recommendations in planning and carrying out special programs.

Participants in a two-hour-long panel discussion at the AWAT convention on questions dealing with management and costs were (l. to r.): Frank Norfleet of Parts, Inc., Memphis; Ned Bell of Standard Parts Co., Memphis; Marvin Neal of Knoxville Rod & Bearing Co., Knoxville; Murray J. Haber of Auto Parts Co. of Nashville; William C. "Bill"

Herbert, editor of Southern Automotive Journal, moderator; James C. Parker of Jobbers Warehouse, Inc., Chattanooga; Art Wolff of National Auto Supply, East St. Louis, Ill.; Jack L. Finn of Gardner, Inc., Columbus, Ohio, and Hinton Y. Crockett of Lebanon Auto Parts Co., Lebanon. The nine men's years of experience in the automotive industry totaled 195.



Customers Aim Guns at Jobbers At Annual Alabama Convention

WHAT their customers expect of them will be told—by the customers—to the members of the 23-year-old Automotive Wholesalers Association of Alabama at their annual convention June 25-27 at the 400 Motel at Pensacola Beach, Fla.

Participants in a panel on "What I Expect of the Automotive Parts Jobber" will be L. E. "Tommy" Thomas of Birmingham, vice president of the Automobile Dealers Association of Alabama; Bruce West, president of the Alabama Service Station Association; Ben Mitchell of Selma, president of the Independent Garage Owners of Alabama, and Jack I. Gillikin of Mobile, executive vice president of Gulf Transport Co., a large fleet operation.

Each will speak for about ten minutes, followed by a question-and-answer period. William C. "Bill" Herbert, editor of *Southern Automotive Journal*, will be the moderator.

Executive Secretary John W. Rooney also announced these speakers:

J. A. "Jack" Bryant of Bowling Green, Ky., president of the Automotive Service Industry Association, who will address the luncheon on Monday, June 26.

Sterling B. Williams, regional director of the wage-hour and contracts divisions of the U.S. Depart-

ment of Labor, who will cover problems of the wholesaler in this field.

Travis Williams, Jr., chief of the sales tax division, Alabama Department of Revenue, who will explain some sales tax angles affecting jobbers.

S. M. "Bill" DuBois, vice president, Universal Underwriters Insurance Co., Kansas City, Mo., who will be heard on "The Insurance You Do Not Have."

Charles H. "Chuck" Davis, executive editor, *Jobber Product News*, Chicago, who will speak on "Your Obligations to Your Association." He is the former manager of the highly successful Florida Automotive Wholesalers Association.

A banquet and floor show, an Hawaiian luau, dance and cocktail party are part of the lighter side of the convention, which is restricted to wholesalers—members and non-members of the association.

Sam B. Meadows of Montgomery is president of AWAA, Irvin F. Siegal of Birmingham is vice president and W. G. "Jake" Woolfolk of Montgomery is treasurer.

M. D. "Buck" Taylor of Andalusia, Ala., one of the best known and most colorful wholesalers of the South, died of a heart attack May 30—only five days after one of his usual doings of serving the aftermarket which he loved. The president of Taylor Parts & Supply and past president of the Southeast Automotive Show and Automotive Wholesalers Association of Alabama appeared at Orlando May 25 in a panel discussion of business management and finance sponsored by Florida Booster Club B-36. He was universally known as being outspoken, dynamic—and soft-hearted. He told the Orlando audience of 125 persons that he was southeastern Alabama's "first grease-monkey," entering the automotive industry in 1908 as a boy.

A. J. "Al" Pendergraft, Jr. (shown here), manager of the Portsmouth, Va., branch of Chesapeake Auto Supply Co., Inc., Norfolk, has been appointed assistant vice president of the firm, President Edward J. Brickhouse announced. Pendergraft joined the organization in November 1945 and progressed from shipping department to counter to salesman and in 1958 to branch manager at Portsmouth.



Vice President Harben

Harben Is Elevated At R. T. Clapp

D. T. "Doug" Harben has been promoted to vice president and assistant manager of R. T. Clapp Co., long-time wholesalers of Knoxville, Tenn., President and General Manager A. D. Moody announced.

Harben joined the company in March 1959. Earlier he had operated a service station in Knoxville and at one time was service manager for Firestone Tire & Rubber Co. in Knoxville, Chattanooga and Atlanta.

R. T. Clapp founded the company in 1914. The well-known firm serves eastern Tennessee, southwestern Virginia and western North Carolina. Stockholders besides Moody and Harben are Mrs. R. T. Clapp, widow of the founder; Earle Frazier and O. Leon Montgomery.

Taelman Succeeds Heeren As Permatex Treasurer

EDGAR C. Taelman, managing director of Permatex Co., has been named treasurer, succeeding Ernest G. Heeren, vice president and treasurer, who retired after 40 years with the company.

Heeren, who will continue as a director, is a past president of Motor and Equipment Manufacturers Association. Taelman joined Permatex in 1956 and was comptroller before becoming managing director in 1959.

Baird Dynamic Names Kansan

Baird Dynamic Corp. has appointed Kemper S. Moore of Mission, Kan., to cover its Kansas and Missouri territory.

Rebuilt power brake boosters have been added to the lines of S. L. Miori Co., Wharton, Texas, owner S. L. Miori announced.



E-6

FLEET

Hydraulic

HAND JACKS

Fully guaranteed — tested at 1½ times rated capacity.



1½, 3, 5, 8,
12, 20, 30,
50, 100 TONS
Regular and
Tall models.

Operate in horizontal or vertical position. For car, truck and heavy equipment service, industrial and construction uses.



See them at
your NAPA
Jobber

EDGEWATER AUTOMOTIVE DIV.
St. Joseph, Michigan



Personnel of The Motor Mart, Dallas, Texas, look over a company car after having added the Golden Glide shock absorber line. Bernard Egan is president of the firm, whose founder, Joe M. Egan, died a year ago.

Perfect Circle Appoints Minshall Vice President

DREX D. Minshall has been chosen for the newly-created position of vice president—marketing for Perfect Circle Corp., and will be concerned with all domestic marketing and sales activities, including coordination of activities of



the manufacturers' sales, replacement sales and advertising divisions.

Since 1939, Minshall has been with The Gates Rubber Co., Denver, Colo., most recently as manager of automotive and hardware sales.

A director of the Automotive Service Industry Association, Minshall is also on the advisory council of the Independent Garage Owners of America. He is the author of many trade paper articles and has given numerous talks on subjects related to the automotive service field.

E-Z shock absorbers, Triplex lenses and Du Pont No. 7 products have been added by Service Auto Supply Co., Atlanta, Ga., according to Harry N. Busko, general manager.

Antifreeze Consumption Increases Slightly

AMERICAN motorists consumed almost 121,000,000 gallons of antifreeze in 1960, compared with 120,000,000 gallons marketed in 1959, according to the sixth annual survey conducted by the Automotive Division of the Chemical Specialties Manufacturers Association.

The survey also revealed that primary ethylene glycol type antifreeze accounted for 110,447,171 gallons (90% of the total) consumed last year, while 10,455,112 gallons of methanol type were marketed. In 1959, the figures were 108,059,739 of ethylene glycol and 12,138,444 gallons of methanol.

The trend in recent years toward greater use of gallon cans continued with an increase of 2,500,000 gallons in 1960.

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(while space is available)
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DETROIT

Special **FAMILY RATES**

No Charge for Children 12 and Under

Is the center of all downtown activities. Newly decorated. Ultra modern, comfortable guest rooms. Excellent food at moderate prices in our modern coffee shop and cafeteria. Radio, Television Room Available. Air Conditioned rooms in season.

800 ROOMS
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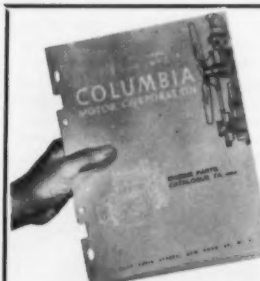
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Columbia, the oldest and largest company specializing in foreign car parts, offers this new catalog. In addition to engine parts, Columbia carries a tremendous stock of clutches, brakes, electrical equipment, tools and accessories for all European cars. Make Columbia your one supply source for foreign car parts. Competitive prices; immediate delivery.

COLUMBIA MOTOR CORP.

419 East 110th Street, New York 29, N.Y.

Switch to AirCon "Freon" 12



... For Faster*, More Profitable Auto Air Conditioner Service!



1 Easier, More Convenient to Use

AirCon's precision packaged "Freon" 12 in disposable, 15-ounce containers represents the faster, more profitable way to service auto air conditioners. This convenient container once and for all does away with hard-to-handle tanks, faulty scales and the inaccuracy of sight glasses that never tell you 'when'. With AirCon "Freon" 12 in cans there are never any deposits, left overs or loss of profits.

2 Eliminates Guesswork

Every can of AirCon "Freon" 12 is pre-measured at the factory to exactly 15 ounces. This means your profits are always protected because you know exactly the amount of AirCon "Freon" you are using. There is never any guessing about what to charge the customer. You know because you have the empty cans to prove it.

Start protecting your profits now with the convenient AirCon can today!

3 100% Pure - No Contamination

As an auto air conditioning service man you know how important cleanliness is. Allstadt Mfg. Co., marketer of AirCon "Freon" 12, is not an aerosol loader for insecticides, hair sprays or other products. Pure, 100% pure, "Freon" 12 is the only product that is allowed to pass through our surgically cleaned packaging machines.

4 Available at Your Jobber

By the carton or by the can, AirCon "Freon" 12 is as near as your near-by automotive parts wholesaler. The next time you call your jobber for any reason ask about AirCon "Freon" 12 and start using AirCon "Freon", the best automotive air conditioner refrigerant in the convenient, easy-to-use 15-ounce can.



*SPECIAL AIRCON VALVE COMES UNASSEMBLED (1) Screw valve body into three-pronged clamp and make sure wing nut is tight (clockwise). (2) Push pronged clamp all the way over rim on top of AirCon Refrigerant 12 can. (3) Hold the valve in one hand and turn can counterclockwise with the other as far as brass shoulder will permit. The top of can is now pierced. Attach charging hose and use contents as needed.



... AirCon Refrigerant Oil, Too!

Also available at your jobber is this handy, 30-ounce container of Type 300 AirCon Refrigerant Oil. Used in all makes of auto air conditioner compressors, AirCon Refrigerant Oil is packaged under the same rigid specifications used for AirCon "Freon" 12.

Allstadt Mfg. Co. is the largest exclusive packager of "Freon" 12 in the world. "Freon" 12 and Refrigerant Oil are the company's only business. For guaranteed quality and purity, ask your jobber for the products bearing the familiar AirCon label. It's your assurance of the best!

Air Con

ALLSTADT MFG. CO.

2004 Wall Street

Dallas, Texas

for Quick,
Deep-Down Cleaning
in Step-Down Cars



you need a PULLMAN VACMOBILE

Throw your whiskbroom away. Almost every car is a step-down design today. Put a powerful, portable Pullman Vacmobile to work for you. Watch how thoroughly, how quickly it cleans step-down car interiors!

In seconds Pullman's strong suction gets deep-down dirt, ground-in soil . . . cleans like no broom or brush ever can. Gets carpeting, upholstery and car trunk spotless. Gives that extra service touch that keeps customers coming back for more to your station.

Call or write for full details today:

Pullman

PULLMAN VACUUM CLEANER CORP.

25 Buick Street, Boston, Mass. Dept. SJ-6

Designed especially for the Automotive Trade

- Big wheels glide over sills, up ramps
- Accordion hose reaches back seat and trunk
- Exclusive "Never Clog" Filter
- PAY ONLY 40¢ A DAY WITH PULLMAN'S 1/12 PAYMENT PLAN!



This shows a portion of the crowd who attended the brake clinic held recently by Oklahoma Brake Service Co. at Tulsa and which was conducted by T. J. "Red" Gordon, Gray-Rock field engineer.

GM President Refutes "Better Car" Illusion

"ONE OF the most common illusions"—that the metal in today's car bodies is thinner than the metal in cars of 20 or 30 years ago—drew comment to the contrary from General Motors President John F. Gordon.

Addressing the 53rd annual meeting of GM shareholders in Wilmington, Del., Gordon said, "Actually, the thickness of the metal in many parts of today's cars is practically the same as it was in the '30's, and, in the case of several important body sections, we now use heavier metal.

"In fact, the entire body of any standard-sized car we make today is heavier than the body of the comparable make and model back in the 1930's. The body of a 1961 Bel Air four-door sedan, for example, weighs 1,352 pounds compared with 934 pounds for the body of a 1936 Chevrolet Master four-door sedan."

The GM president also described improvements in paints, trim and body hardware, hoses, brake linings and other features.

Moss Moves up with Willys

Cruse W. Moss has been named executive vice president of Willys Motors, Inc., President Stephen A. Girard announced. Moss joined the Kaiser organization at Willow Run, Mich., in 1947 and became assistant general sales manager of Willys when the company was purchased by Kaiser in 1953. He later became vice president in charge of sales. As executive vice president, Moss will direct all operations of the company.

Ford Appoints Rupert Lewis

Rupert F. Lewis, a native of Glenmora, La., has been appointed sales manager for the New Orleans district of Ford Division, Ford Motor Co., succeeding Earl S. Davidson, who retired after 15 years. Lewis joined the company in 1947 as a business analyst trainee at San Jose, Calif.

Why Not Try for Seven Bucks?

Others Succeeded. See Page 121.



This point clinic, attended by 42 persons, was held recently at Baker Body Shop in Knoxville, Tenn., co-sponsored by the Armstrong Co., a specialty paint wholesaler, and McNutt and Burks, Inc., automotive parts jobber and distributor, both of Knoxville, George W. Kinnie, president of the latter company, announced. Manufacturers were represented by Tom

McClusky of Ditzler Color Division, who was in charge of the meeting; Herbert Hammond of Carborundum Co. and Ell Holmes, agent for John Bean Co. Application of acrylics, repair of automotive finishes, specialty items and equipment were taken up by these specialists for the men who came from the surrounding area.

Sales Climb Upward in Texas; Mississippian Cusses Factories

TEXANS generally have forgotten the dry weather of a year or two ago and wholesalers' sales are, as a whole, booming right along. For example:

San Antonio—"Sales for the first four months of this year are up 20%."

Smaller Texas city—"Our sales for the period are up 12% over the same months of last year."

El Paso—"Sales are up 15%."

Down in the valley—"Sales are higher by 10.3%."

These were among the reports in reply to a questionnaire mailed to 350 jobbers over the South and Southwest.

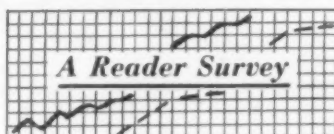
Over-all, 61% reported higher sales for the first four months of '61 than the same period of '60. Thirty per cent listed a downturn and eight per cent reported the same volume.

An Atlanta, Ga., executive commented:

"We have had a terrific first four months of 1961. Our sales are 35% ahead of 1960, but our prime concern is that collections are very slow. Substantial accounts are now running 30 days behind in their payment. However, the outlook for the balance of the year is excellent."

And another Atlantan said his volume was about the same. "Volume is holding up very good" was his attitude.

A long-time St. Louis, Mo., house's sales were \$213,081, compared with \$197,648 the same months



of last year. "With all the talk we hear about how lousy business is," said the president, "we are grateful we do not have to peddle any of this gloom."

A Florida Panhandle firm's sales were up 16% due chiefly to the addition of a branch and machine shop.

"Credit is probably our greatest problem," said an official. "Close credit supervision is resulting in a better picture in this department."

Sales were up four per cent for a Waco, Texas, company. "New- and used-car sales have improved during March and April," was the comment there.

Volume was about the same for one Jackson, Miss., firm. Said an executive:

"The jobbers have little or no protection on lines that they sell. We are a distributor of several lines as well as a jobber and have a considerable inventory investment. The manufacturers hold our feet to the fire as far as any price is concerned, but then they are so hungry for business they will go out and sell every wagon jobber, oil jobber or anyone that just has a sign out. These jobbers have little investment and they go out and offer a discount

on these products, therefore cutting larger accounts out of that line.

"The manufacturers continually ride us about price control, but each is so hungry for the small-jobber business that he does not care what price he sells it for so long as he sells their line.

"I contend that the manufacturer is responsible for the shorter margin of profit we are working on and nearly every manufacturer is guilty."

An Oklahoman's sales were down two per cent. He added: "Tire chain sales being down is the reason for the decrease. If chain sales were the same for '61 as '60, our volume would be a little ahead."

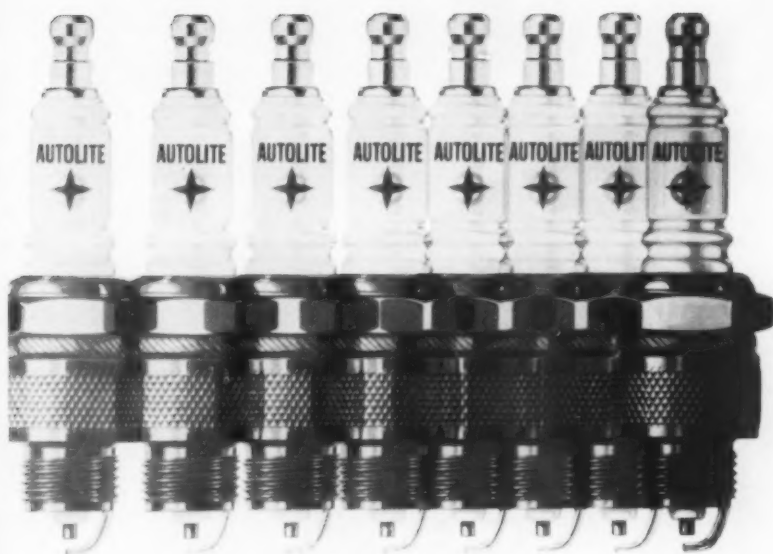
Volume was off 22% for one Albuquerque, N.M., company. It was 25% lower for a company in South Carolina's coastal plain.

Earl R. Fiene has been appointed vice president and director of sales in the automotive original equipment and replacement fields of The Electric Autolite Co. He joined the company last year after 23 years of selling in the original equipment market for Stewart-Warner Co.





THIS SPARK PLUG



IS GOING PLACES!

What does this mean to you? Plenty, if you sell spark plugs. Take advertising support, for instance. And the confidence your customers have in the products you sell. You get a bigger bundle of both when the spark plugs you sell are Autolite. And the ads you've seen so far this year are only the beginning. Get with Autolite and hitch on to a rising star. **Some things you'll like about Autolite Spark Plugs.** First thing you'll like is the way we build our spark plugs. Double-heat-sealed to prevent compression leakage. How about Power Tip design, the first spark plug that cleans itself while you drive? We make Power Tip Spark Plugs for all overhead valve engines. And that includes more than 95% of the cars on the road today. **We know you have stocking problems.** Obviously, carrying more than one brand of spark plug creates a problem for you. Increased inventory investment. Let us solve it. The line of Autolite Spark Plugs is designed to give excellent market coverage with only seven different types on your shelf. With these seven types, you have 95% of the market at

your fingertips. **Our research department is going strong.** There are several good reasons behind our belief that we make the best spark plugs on the market. Heat-sealing for one. Our development of the resistor plug and the Power Tip design for two others. These new developments came first from Autolite. You can count on more of them in the future. **Our Tab Program is a bigger bargain than ever.** Yes, you can still get valuable premiums free for Autolite Spark Plug box tops. All you do is tear off and save every part number end tab. With everything we've got going to help you sell, they should mount up fast. Your Autolite supplier will be glad to give you a catalog of all the free merchandise we offer. **What's our point?** Just this. There are a lot of new reasons why selling Autolite Spark Plugs is much easier and also more profitable these days. They add up to one very big point: getting with Autolite might be one of your wisest decisions of the year.

If you're still undecided, why not get in touch with your Autolite supplier. You'll find he's a mighty persuasive fellow.



AUTOLITE

IASI Show Committee Goes into Action

FIRST full-scale meeting of the Joint Operating Committee for the 1962 International Automotive Service Industries Show was held April 24-25 in Chicago, where the theme-slogan, "See All That's New in '62!," was approved.

Committee chairman is Victor B. Day, president and treasurer of Bear Mfg. Co., Rock Island, Ill.

The show is scheduled for February 28 and March 1-3 at the Navy Pier in Chicago. As before, it will be a manufacturer-through-wholesaler-to-retailer event.

Phase two of the two-part show will be the special trade days, March 2 and 3, for retail automotive outlets.

Topics discussed at the April meeting included floor plans for manufacturers' exhibits, space drawing, show hours, automotive trade days, speakers bureau, retailer prizes, free bus service from Navy Pier to Loop and area hotels, admission identification and show publicity.

According to Joseph E. Fischer, president of Auto Parts & Gear Co., Chicago, who is vice chairman



Members of the Joint Operating Committee for the 1962 International Automotive Service Industries Show, sponsored by Motor & Equipment Manufacturers Association and Automotive Service Industry Association, are (l. to r.): seated, William J. Menghini of Springfield Auto Supply Co., Springfield, Ill.; Don H. Teator of Perfect Circle Corp., Hagerstown, Ind.; Jack J. Dempsey of Thor Power Tool Co., Aurora, Ill.; Hal F. Freyer of Aro Equipment Corp., Bryan, O.; Ruth Hall of Hall-Erickson, Inc., Chicago, Ill.; George W. Stout of Applegate Advertising Agency, Inc., Muncie, Ind.; Wayne E. Rapp of Walker Marketing Corp., Racine, Wis.; A. C. Volkens of The Sleg Co., Davenport, Iowa; standing, Bill Raftery of Signal-Stat Corp., Brooklyn, N.Y.; Virgil C. Smith of Auto Parts Co., Ann Arbor, Mich.; Steven S. Gordon of Republic Gear Co., St. Clair Shores, Mich.; Joseph Fischer of Auto Parts & Gear Co., Chicago, JOC vice chairman; Victor B. Day of Bear Mfg. Co., Rock Island, Ill., JOC chairman; Charles A. Klaus of MarPro, Inc., Chicago, and Hubbard H. Erickson, Jr., of Hall-Erickson, Inc. Not shown is G. H. Goehrig of Blackhawk Mfg. Co., Milwaukee.

Boating
is the exciting-est way to explore the beauty of crystal Mountain Lake. Mountain grandeur. Scenic majesty. Open May 23-Oct. 1. American plan. Reasonable rates. Secluded cottages, hotel accommodations.

Tennis
Fishing
Swimming
Horseback riding
Mountain climbing
Golfing

hotel
mountain
Lake

Write for folder, Mountain Lake, Va.

of JOC and chairman of the JOC publicity committee, it was unanimously agreed that the 1962 Show should be publicized more thoroughly than any of the preceding shows.

Sponsoring associations are Motor and Equipment Manufacturers Association and Automotive Service Industry Association.

An innovation of the show will be a special "Fleet Day," according to Day, for the nation's fleet operating personnel.

As at the 1960 show in the New York Coliseum, exhibiting manufacturers will plan their booths for new products, selling plans, merchandising ideas, etc., not only for wholesalers but for the service trades.

The show is one of the largest booth shows in the world. Its ever-increasing size is due, in part, to the rapid growth of the automotive service industry. Compared to less than 6,000 automotive wholesalers in 1936, there were an estimated 14,600 in 1960. The number of independent repair shops has almost doubled since 1936, now totaling about 110,000. This does not include many specialty repair shops, of which there is a growing number. Car dealers and service stations bring the total retail outlets up to at least 360,000.

6 WHO SAY, "YES!"

Here are six of the many thousands of dealers who say, "YES, SERVICE MEANS MORE THAN PRICE IN SELLING ANTI-FREEZE!"



Herb Millington, Kansas City, Mo.

"Listen, if you sell complete winterizing service, you're way ahead of the price cutters. Customers want this service! And you'd be surprised at what we make on badly needed new fan belts alone. And did we make money on our 'PRESTONE' Anti-Freeze sales? You bet we did!"



John Ford, Portland, Ore.

"I try to service all of my regular customers before the first-freeze rush. If a customer gets caught in this rush, he's likely to go somewhere else and see his anti-freeze 'dumped' in. Naturally he says to himself, 'That looks easy,' and next year he's joined the do-it-yourself group."



Wallace Hawkins, Minneapolis, Minn.

"Fair trade is out in our state so what I do is start early — before the cut price ads break and sell both SERVICE and 'PRESTONE' Anti-Freeze. Sure my customers like it. What's more, I've been making good money replacing worn out service parts!"



Gene Graham, Chicago, Ill.

"I had my best year last year — sold 1,500 gallons of 'PRESTONE' Anti-Freeze. Did I sell service? I sure did! It pulls in anti-freeze sales, and you know, I made a nice profit on new hoses, too."



Frederick Haug, New York, N. Y.

"I don't know about other dealers, but I had one of my best anti-freeze years last year — sold over 80 cases. Good service and 'PRESTONE' Anti-Freeze are what did it for me! I point out that I have the proper equipment to give good service—and good service often means new parts, more sales!"



Monroe Owens, Dallas, Tex.

"I get most of my regular customers EARLY for complete winterizing service and 'PRESTONE' Anti-Freeze. And, as a result, I sell a lot of new hoses, belts and thermostats, too! Believe me, there's no better way to sell anti-freeze than with SERVICE!"

If you haven't yet discovered the sales power in SERVICE plus "Prestone" Anti-Freeze, do it this season. When you sell service, you sell peace of mind! And when you sell "Prestone" Anti-Freeze, you sell the world's most tested, most trusted protection!



UNION CARBIDE CONSUMER PRODUCTS COMPANY • Division of Union Carbide Corporation • 270 Park Avenue, New York 17, N. Y.

"Prestone" and "Union Carbide" are registered trade-marks for products of

Test of NAPA Places Stress on Selling

SELLING efficiency on the part of the jobber salesman must be increased in the years ahead if volume is to be increased and profits maintained at their present level.

That is what D. N. Test, Jr., of San Antonio, Texas, president of National Automotive Parts Association, told that body at its spring meeting last month in Miami Beach.

"For years," he said, "there has been a great deal of talk about screening applicants for selling jobs, and an increasing amount of actual practice, to minimize the risk of employing for sales work a man who, beneath the surface, is inherently unfitted for the job."

A factor of equal or greater importance—though not so widely discussed, Test said, is the responsibility of management in the training and direction of the newly-employed salesman. Customers and prospects will listen to the man, he said, who sells what his company can do for the dealer, in products, in service and in advertising and merchandising support.

E. J. Muldoon, NAPA vice president and general manager, told the



Top: President Test
Above: Vice President Muldoon

general session that "automation has made some big strides but it sure hasn't come close—and never will—to solving the personal selling equation.

"So I urge all of you men of management at both the warehouse and manufacturer level to make sure that you have the right men in the key positions, that you have the right replacements coming along being properly trained to assume new and greater responsibilities when the need arises."

South Carolinian Quits After 41 Years

Poor health has forced F. W. Senkbeil, president of Motor Parts Co., Inc., Anderson, S.C., to close his business after a total of 41 years.

Senkbeil said, "We have a very fine 6,000-square-foot building available at once, particularly built for the parts business, but equally suitable for other businesses. It is an ideal location with no parking problem."

Grey-Rock to Offer Parts

The launching of a complete line of hydraulic brake parts has been scheduled for August 1 by Grey-Rock Division of Raybestos-Manhattan, Inc., Manheim, Pa. Sales Manager John MacMurray said the division will supply a one-stop, one-source line of brake parts for all makes and models of cars.

Robert J. "Bob" Kavanaugh, formerly executive secretary of the San Antonio (Texas) Automotive Wholesalers, has been appointed field secretary for the Automotive Service Industry Association's north-central region which includes Kentucky. Kavanaugh's wide experience in the automotive industry includes ownership of Kavanaugh's Home & Auto Supply in Port Arthur, Texas, from 1946 to 1951.



KEM

trouble free inline gas filters

with
micro-BRONZE®
filter element



KEM MANUFACTURING CO., INC.
FAIR LAWN, NEW JERSEY, U.S.A.

FUEL PUMPS AND IGNITION PARTS . . . SINCE 1920



Micro-BRONZE
filter element
Can't waterlog,
swell or flake

FILTERS dirt and water
FLOWS free and clean
— never dumps residue
FITS all cars . . . 3 sizes,
with hose and clamps



Shown here are managers and salesmen from Wagner Electric Corp.'s midwestern area being addressed by President G. W. Brown in St. Louis at one of the company's spring sales meetings at which selling plans for 1961 were discussed. The meeting included the kickoff of the nationwide "Win-with-Wagner" sales campaign, which extends from May 1 through July 31.

Kansas Group Schedules Organizational Meeting

CHARTER meeting of the Automotive Wholesalers of Kansas was scheduled for 1:30 p.m., Sunday, June 11, at the Jayhawk Hotel in Topeka.

A temporary board of directors has developed operating plans for a state association. Services to be offered to members will include legislative representation, business conferences, trade bulletins, low-cost insurance programs and credit-collection data.

Interested wholesalers would be given the opportunity to make suggestions or ask questions of the directors and officers, according to President Idris Regnier of Regnier Auto Parts, Concordia, and Vice President Paul Woolwine of Woolwine Supply Co., Pratt. Those joining during the meeting would be "charter members," it was announced.

Featured speakers were to include Charles H. "Chuck" Davis, executive editor of *Jobber Product News*, and Richard A. Melvin, executive assistant, Automotive Service Industry Association, both of Chicago.

Owatonna Tool Names Kreager

Arthur Kreager has been appointed district sales manager in West Virginia for Tools & Equipment Division of Owatonna Tool Co., Owatonna, Minn., according to Sales Manager S. L. Richmond.

LUCAS gives you "on the spot" service, coast to coast!



Every Dot's a LUCAS Dealer or Distributor, Every Star's a LUCAS Factory Branch!



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S. SAN FRANCISCO, Calif., 171 Beacon St.

CHICAGO 41, Ill., 5001 W. Belmont Ave.

HOUSTON 20, Tex., 6055-6057 Armour Dr.

JACKSONVILLE 5, Fla., 400 S. Edgewood Ave.

SEATTLE 8, Wash., 5516 First Ave. South

BOSTON, Mass., Southwest Pk.,

Rt. 1 at Rt. 128, Westwood

DENVER 7, Colo., 6001 E. 38th Ave.

BALTIMORE 6, Md., 7114 Commercial Ave.



A. L. "Al" Hines of Hines Auto Parts Co., Inc., Hollywood, Fla., has been appointed adviser on the Broward County School Board's advisory committees on automotive mechanics and automotive body repair and refinishing. Hines is the immediate past president of the Florida Automotive Wholesalers Association and has long been active in civic affairs in his area.



When Southern Friction Materials Co. of Charlotte, N. C., became a warehouse distributor for Monroe shock absorbers and Load Levelers recently, company executives and sales representatives toured the Monroe Auto Equipment Co. plant at Hartwell, Ga. Shown here are (l. to r.): Jack Mitchell, Monroe mid-South division manager; Terry Dean, Monroe field engineer; Mrs. Howard Snow; Alex Alexander, sales representative for the Charlotte firm; Howard Snow, president, and Homer Orren, general manager of SFM; John Delsie, Monroe operations manager, William Dunkin and John Camp, SFM sales representatives, and Mrs. Dunkin.

"Better Built" rebuilt engines by Southern Motors, Inc., Orlando, Fla., have been added to the line of Marianna Auto Parts, Marianna, Fla., General Manager Jim Rule announced.

Black & Decker Appoints Wayman at Miami

PETER B. Wayman has been named Miami (Fla.) district manager for Black & Decker's Industrial-Automotive Division, succeeding Edward Stuart, who retired after 41

years.

Other appointments announced by General Sales Manager Glen H. Treslar include P. J. Girgen's transfer from sales representative in the Memphis district to automotive sales representative at Detroit. E. R. Jex replaces Girgen in Memphis.

I'M TIRED OF BEING *SOAKED!

*WITH BIG JACK REPAIR BILLS



Aren't you, too?

It's easy to Repair-it-yourself with a Jack-Pack Kit. Prices start at about \$2.50

Order from your jobber



or write for FREE FOLDER "Facts on Jacks"

JACK-PACK MFG. CO., 2115 N. Marianna Ave., Los Angeles 32, Calif.

TIRED? Heat Resistant Cups Get Tired Too . . .

That's why TRU-TORQUE uses metal expanders with ALL rubber cups.



You cannot control the operating temperature of your brake jobs . . . but you can insure them against the dangers of excessive heat by using TRU-TORQUE Safety Cups or Dual Action Expanders --

Most economical .

Available at your Local Jobber

TRU-TORQUE
OTTO-ITEMS, INC.
1200 Reco Ave. St. Louis 22, Mo.

Texan Adds Shop Space, Holds Parts Show

EUBANKS Auto Parts, Midland, Texas, has added 2,800 square feet of space to its No. 2 store, in which it will operate a magneto shop and small engine repairs and sales, owner E. P. Eubanks announced.

In the addition last month, the firm held a district-wide auto parts and accessories show with over 25 manufacturers and suppliers participating.

Sandlapper Garagemen To Meet in Greenville

THE annual convention of the Independent Garage Owners of South Carolina will be held at Greenville's Poinsett Hotel August 4-5, Secretary-Treasurer J. H. White announced.

W. Athell Yon of Charleston is president of the group, which has units in several cities.

Hills Automotive Parts, Georgetown, S.C., has added **Johnson** out-board motors and **Glastron** boats to its line, President **J. M. Hills** announced.



Representatives of Johns-Manville's Dutch Brand Division who attended a recent Southern district sales meeting in New Orleans are (l. to r.): seated, Jim Corey of Spartanburg, S. C.; A. E. Thomas, district sales manager; W. H. Bartlett and W. G. Haffer of division headquarters in New York; and M. J. Wood of general headquarters in New York; standing, Bob Allen of Birmingham, Ala.; Dick Erickson of Tulsa, Okla.; Dave Somerville of Atlanta, Ga.; Phil Weber of Jacksonville, Fla.; Ed Brunner of Dallas; E. H. Wells, division general manager, New York; and Jules Kercher of Houston. Also present was Division Sales Manager J. R. Allen.

Wilkins Retires at Permatex

Ralph E. Wilkins has retired as Southeastern regional sales manager for Permatex Co., Inc., according to President C. A. Benoit, Jr. Born in Dawson, N.M., Wilkins

began his 28-year career with the company as a salesman in Denver, Colo. Over the years he covered the Rocky Mountains area and became regional sales manager for the mountain states. In September 1958 he moved to Jacksonville, Fla.

RAJAH HAND CRIMPING TOOL



NOTE—Simplicity of this Tool. It cuts and strips the cable. Also crimps Rajah Terminals to cable.

Order from your jobber or direct from us.
Send for circular and prices.

The Rajah Company, 35 Verona Ave., Newark 4, N. J.

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NEW! "Side Arm" Screw Driver by

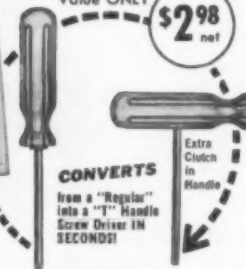


VACO®

2 interchangeable blades . . .
1/4" regular and No. 2 Phillips

A \$4.00
Value ONLY

\$2.98
net



CONVERTS
from a "Regular"
into a "T" Handle
Screw Driver IN
SECONDS!

No More "Fishing Around" For the Right Screw Driver

Everyone has wanted a high torque "T" handle screw driver . . . and VACO's "Side Arm" design now gives you the "T" handle plus regular . . . in ONE unit. The **FREE BONUS** gives you a complete fishing kit in addition . . . at no extra cost.

See Your Parts Jobber

"Handi-Angler" FREE BONUS Includes:



A regular \$1.00 seller

VACO PRODUCTS CO., 317 E. Ontario St., Chicago 11, Illinois
In Canada: Vaco-Lynn Products Co., Ltd., Montreal 1, Quebec

***They say:**

FILT-O-REG IS BEST!

TUNE-UP SPECIALISTS
MECHANICS
CARBURETOR
SPECIALISTS
DEALERS
JOBBER
WAREHOUSEMEN
GARAGEMEN
SERVICE STATION MEN
MOTORISTS

**Best DESIGNED
Best ENGINEERED
Best KNOWN
Best MADE
Best PERFORMER**

FILT-O-REG®

FILTERS the fuel... REGulates pressure

**Sell the Best... Sell Fil-O-Reg
and forget the rest!**



SOLD ONLY THRU JOBBERS!

Write for FREE literature & Bulletin #302

"How Over-Pressure Causes Carburetor Flooding"

Made by ALONDRA, INC., 959 CRENSHAW, LOS ANGELES 19



PULLZIT THE NEW U-JOINT TOOL



**takes the hard work out of
U-Joint servicing!**

- Does the complete job of disassembly and assembly
- Pulls (and replaces) the trunnion bearing cups . . . with no hammering, no dangerous slips, no damage to bearings
- Lets you complete the toughest U-Joint servicing in 20 minutes by the clock

Add new PULLZIT profit dollars to your lube rack operation today!

**Sold on a "Complete Satisfaction or
Your Money Back" Guarantee**

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The (AAR) and/or (B) following many listings indicate membership in the Automotive Affiliated Representatives and/or the Automotive Booster Clubs International.

ALABAMA

Alan Sales Co.—Birmingham (B)
Acme Air Appliance Co., Inc.
Herman J. Downey—Birmingham
Blackstone Mfg. Co.
National Brake Block Corp.
W. P. Piperburg—Birmingham
Houser Engineering & Mfg. Co.
Lee Filter Company

ARKANSAS

Doyle Moore—Little Rock
F & B Manufacturing Co.

FLORIDA

R. L. Bridges & Associates—Gainesville (B) (AAR)
L & S Bearing Co.
Pick Mfg. Co.
Vaco Products Co.
Alomite Co. of Florida—Jacksonville
Alomite Div.
Hirsig-Brantley Co.—Jacksonville (B)
H. B. Egan Mfg. Co.
J. H. Jones—Jacksonville (B)
Bishman Mfg. Co.
Homestead Valve Mfg. Co.
Floyd Ware—Jacksonville (B)
L. R. Oatey Co.

I. C. Dimmick—Largo (B)

Champion Pneumatic Machinery Co.
John J. Somers—Largo
World Bestos Corp.
Larry Grissom—Miami (B)
P. A. Sturtevant Co.
Maxim Hershhey—Miami (AAR)
Alondra, Inc.
Hal R. Daniel—Orlando (B)
John Bean Div.
J. L. Meadows—Orlando (AAR) (B)
P. A. Sturtevant Co.
T. H. Shealy—Tampa (AAR) (B)
Laher Spring & Tire Corp.
Max Yaras, Tampa (AAR) (B)
National Brake Block Corp.

GEORGIA

Aaron & Bell—Atlanta (AAR) (B)
Dupli-Color Products Co.
Clark-Richards Co.—Atlanta (AAR) (B)
American Grease Stick Co.
Shurhit Products Co.
Al F. Clayton—Atlanta (B)
Grand Automotive Products
J. L. Daniell Co.—Atlanta (AAR) (B)
Pullman Vacuum Cleaner Corp.

Clarence Ethier—Atlanta (B)
Homestead Valve Mfg. Co.

Gene Fike—Atlanta (AAR) (B)
Storm-Vulcan, Inc.

Ray Gandy—Atlanta (B)
Jack-Pack Mfg. Co.

Orville Harpole—Atlanta
Harvey E. Hanson Co.

J. L. Mattie—Atlanta (B)
Otto-Items, Inc.

W. L. Morris—Atlanta (B)
Spray Products Corp.

Ray M. Smith—Atlanta (AAR) (B)
John Bean Div.

Arl Styron—Atlanta (AAR) (B)
F & B Manufacturing Co.

N. A. Williams—Atlanta (AAR) (B)
Blackhawk Hand Tools
Breeze Corp.
Gojzer Co.

Edward Zinnell—Atlanta (B)
Lee Filter Corp.

F. H. Williams Co.—Covington (AAR) (B)
Acme Air Appliance Co., Inc.
Monkey Grip Sales Co.

The Bob Black Co.—Decatur
Laher Spring & Tire Corp.

Charles W. Glass & Assoc.—Decatur (B)
Aro Equipment Co.

Roy Lippincott—Decatur
Champion Pneumatic Machinery Co.
George H. Davison Co.—Marietta (AAR) (B)
Armstrong Hydraulics, Inc.
W. M. Carleton—St. Simons Island (B)
D L Products, Inc.

KANSAS

H. E. Russell—Iola (AAR) (B)
Pick Mfg. Co.
Charles L. Sparks—Mission (B)
Champion Pneumatic Machinery Co.
Marvin Crouch—Prairie Village
Armstrong Hydraulics, Inc.
Breeze Corp.
E. T. Leahy—Prairie Village (AAR) (B)
Homestead Valve Mfg. Co.
Harvey Wise—Shawnee-Mission (AAR) (B)
Alondra, Inc.
Harvey E. Hanson Co.

KENTUCKY

J. Paul Saunders—Bowling Green (AAR) (B)
Bishman Mfg. Co.
Jack Pack Mfg. Co.
Monkey Grip Sales Co.
Lee B. Hughes—Louisville (B)
Acme Air Appliance Corp.
Gojer, Inc.
Grand Automotive Products
Storm-Vulcan, Inc.
M. C. Polindexter—Louisville
John Bean Div.

LOUISIANA

Arch Evans—Baton Rouge
Coats Co.
Elwood Watson—Bossier City
Otto-Items, Inc.

MARYLAND

J. H. Kilnefelter—Baltimore
Aro Equipment Corp.
W. S. Kneavel & Co.—Baltimore (AAR) (B)
Pick Mfg. Co.
H. S. Lindsay—Baltimore
Kem Mfg. Co.
Merv Neal—Baltimore (B)
F & B Mfg. Co.
Sam Shemer—Baltimore
Swiss Laboratory
W. A. Snyder—Baltimore
John Bean Div.
Tom Wilmer—Baltimore (B)
Storm-Vulcan, Inc.
Walter L. Breeding—Towson
Champion Pneumatic Machinery Co.

MISSISSIPPI

J. O. Park—Jackson
D L Products, Inc.
Guy M. Parker—Jackson
F & B Mfg. Co.
K. O. Lee Co.
Southern Sales Co.—Jackson (AAR)
Champion Pneumatic Machinery Co.
C. Guy Keen—Meridian (AAR)
Kem Mfg. Co.
Herman A. Shields—Meridian (AAR) (B)
Muskegon Piston Ring Co.
Precision Automotive Components Co.

MISSOURI

R. S. Black—Kansas City (B)
Lee Filter Corp.
C. N. Buettner—Kansas City (B)
Acme Air Appliance Co., Inc.
American Grease Stick Co.
L & S Bearing Co.
Monkey Grip Sales Co.
Precision Automotive Components Co.
Herb Calkins, Inc.—Kansas City (B)
Blackstone Mfg. Co.
Grand Automotive Products
Jack Pack Mfg. Co.
Wayne S. Frey Co.—Kansas City (B)
F & B Mfg. Co.
G. D. Heath Co.—Kansas City (AAR) (B)
Spray Products
John D. How Assoc.—Kansas City
Dupli-Color Prod. Co.

Charles H. Koslowsky—Kansas City (AAR) (B)
Bishman Mfg. Co.
Everett Lewis—Kansas City
John Bean Div.
Frank Libby Co.—Kansas City (AAR) (B)
Muskegon Piston Ring Co.
Mosher-Williams, Inc.—Kansas City (AAR) (B)
D L Products, Inc.
H. J. Snyder—Kansas City (AAR) (B)
Alistadt Mfg. Co.
M. H. Swanman, Inc.—Kansas City (AAR)
Champ-Items, Inc.
Gojer, Inc.
J. F. Tapp Co.—Kansas City
Blackhawk Hand Tools
Paul K. Wilcox Co.—Kansas City (AAR) (B)
L. R. Oatey Co.
Walter Scott—Kirkwood (AAR)
John Bean Div.
Don Ayd—St. Louis (AAR) (B)
Bishman Mfg. Co.
George M. Gilie—St. Louis (AAR)
Aro Equipment Corp.
Champion Pneumatic Machinery Co.
Russ Nixon—St. Louis (AAR) (B)
Vaco Products Co.
Walter G. Punt—St. Louis (AAR) (B)
Otto-Items, Inc.

NORTH CAROLINA

E. F. Baesel—Charlotte
Houser Eng. & Mfg. Co.
John Cain—Charlotte (B)
Spray Products Corp.
C. C. Case—Charlotte (AAR)
D L Products, Inc.
Larry Kidd Sales Co.—Charlotte (AAR) (B)
Muskegon Piston Ring Co.
Walter F. Pope—Charlotte (B)
D L Products, Inc.
Ben T. Ward—Charlotte (B)
Jack-Pack Mfg. Co.
Otto-Items, Inc.
P. L. Wimberly & Assoc.—Durham (AAR) (B)
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J. S. Longdon—Greensboro
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A. W. Mansfield—Greensboro
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Ruark & Cox—High Point (B)
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OHIO

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Alondra, Inc.
O. T. Hillshafer—Newark
Storm-Vulcan, Inc.

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Coats Co.
B. A. Kline—Oklahoma City (B)
Bishman Mfg. Co.
Harvey E. Hanson Co.
Henry Lees & Associates—Oklahoma City (B)
Grand Automotive Prod.
L & S Bearing Co.
Jack Porior—Oklahoma City
Armstrong Hydraulics, Inc.
Jim Permenter—Tulsa
Spray Products
L. T. Solomon—Tulsa
Champion Pneumatic Machinery Co.

PENNSYLVANIA

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Laher Spring & Tire Corp.

TENNESSEE

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Earl Potter—Memphis (B)
Champion Parts Rebuilders, Inc.
H. B. Robbins—Memphis (B)
John Bean Div.

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P. Stubbsfield—Memphis (B)
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Caphton & McEvoy Co.—Dallas (AAR) (B)
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Precision Automotive Components Co.
John M. Carter—Dallas
Houser Eng. & Mfg. Co.
S. J. Cole—Dallas
Southern Friction Materials Co.
J. S. Connell Co.—Dallas (B)
Jack Pack Mfg. Co.
Manley Valve Corp.
H. M. Cree Co.—Dallas (AAR) (B)
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Pullman Vacuum Cleaner Corp.
Crockett-Jordan-Duncan Co.—Dallas (B)
Spray Prod. Corp.
Gee Cee Sales Co.—Dallas (B)
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Keller-Hyden, Inc.—Ft. Worth (AAR) (B)
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John W. Lovelady—Ft. Worth (AAR) (B)
Gojer, Inc.
J. E. Seifert—Houston (B)
Homestead Valve Mfg. Co.

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